

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: October 18, 2004, 14:25:52 ; Search time 3 Seconds  
(without alignments)  
2.138 Million cell updates/sec

Title: US-09-695-451-1

Perfect score: 73

Sequence: 1 cctgtgcatcttcttgggt.....atgtatcgctaccacaggtg 73

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 0.5

Searched: 3298 seqs, 43931 residues

Total number of hits satisfying chosen parameters: 6596

Minimum DB seq length: 8

Maximum DB seq length: 30

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 3300 summaries

Database : rng1-899.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
C 1	18	24.7	18	1	AAZ48533
C 2	18	24.7	18	1	AAZ48532
C 3	18	24.7	18	1	AAZ48532
C 4	18	24.7	18	1	AAZ48529
C 5	18	24.7	18	1	AAZ48531
C 6	18	24.7	18	1	AAZ48530
C 7	18	24.7	18	1	ABT05026
C 8	18	24.7	18	1	ABT05029
C 9	18	24.7	18	1	ABT05103
C 10	18	24.7	18	1	ABT05091
C 11	18	24.7	18	1	ABT05098
C 12	18	24.7	18	1	ABT05093
C 13	18	24.7	18	1	ABT05100
C 14	18	24.7	18	1	ABT05096
C 15	18	24.7	18	1	ABT05028
C 16	18	24.7	18	1	ABT05094
C 17	18	24.7	18	1	ABT05097
C 18	18	24.7	18	1	ABT05024
C 19	18	24.7	18	1	ABT05027
C 20	18	24.7	18	1	ABT05101
C 21	18	24.7	18	1	ABT05102
C 22	18	24.7	18	1	ABT05025
C 23	18	24.7	18	1	ABT05090
C 24	18	24.7	18	1	ABT05099
C 25	18	24.7	18	1	ABT05092
C 26	18	24.7	18	1	ABT05104
C 27	18	24.7	18	1	ABK16809
C 28	17.6	23.1	24	1	ABK30031
C 29	17	23.3	25	1	ABK30031
C 30	15.8	21.6	20	1	AAV05171
C 31	15.8	21.6	22	1	AAV51522
C 32	15.4	21.1	17	1	AAV74507
C 33	15.4	21.1	17	1	ACD50663

C 34	15.4	21.1	20	1	AAF56086
C 35	15.2	20.8	23	1	ABZ24499
C 36	15.2	20.8	23	1	ABZ68856
C 37	15	20.5	19	1	AAV10706
C 38	15	20.5	20	1	AAV14301
C 39	15	20.5	20	1	AAV09117
C 40	15	20.5	20	1	AAV77555
C 41	15	20.5	23	1	AAV78929
C 42	14.6	20.0	21	1	AAV76633
C 43	14.6	20.0	21	1	AAV65844
C 44	14.6	20.0	21	1	AAV53955
C 45	14.6	20.0	21	1	AAV24557
C 46	14.6	20.0	21	1	ADE52901
C 47	14.6	20.0	21	1	ADA66182
C 48	14.4	19.7	17	1	ACD50662
C 49	14.4	19.7	17	1	ACD50664
C 50	14.4	19.7	20	1	AAV22562
C 51	14.4	19.7	20	1	AAV0791
C 52	14.4	19.7	22	1	AAV51523
C 53	14.2	19.5	19	1	AAV16173
C 54	14.2	19.5	20	1	AAV11921
C 55	14.2	19.5	20	1	AAV11923
C 56	14.2	19.5	20	1	AAV37207
C 57	14.2	19.5	21	1	AAV97999
C 58	14	19.2	20	1	ABK89166
C 59	13.8	18.9	20	1	AAF56085
C 60	13.8	18.9	20	1	ADD89934
C 61	13.6	18.6	20	1	AAV05983
C 62	13.6	18.6	20	1	AAV95277
C 63	13.6	18.6	20	1	AAV10302
C 64	13.6	18.6	20	1	ABL43747
C 65	13.6	18.6	20	1	ABT05172
C 66	13.6	18.6	20	1	ABZ93185
C 67	13.6	18.6	20	1	AAV48785
C 68	13.4	18.4	17	1	ABA77114
C 69	13.4	18.4	17	1	ABA77114
C 70	13.4	18.4	17	1	ACD53467
C 71	13.4	18.4	17	1	ACD52078
C 72	13.4	18.4	19	1	ACA98830
C 73	13.4	18.4	19	1	ACA98827
C 74	13.4	18.4	20	1	AAV3631
C 75	13.4	18.4	20	1	AAV40931
C 76	13.2	18.1	18	1	AAV61163
C 77	13.2	18.1	19	1	AAV12832
C 78	13.2	18.1	19	1	AAV02643
C 79	13.2	18.1	19	1	AAV35894
C 80	13.2	18.1	20	1	AAV49792
C 81	13.2	18.1	20	1	AAV93390
C 82	13.2	18.1	20	1	AAV16412
C 83	13.2	18.1	20	1	ABZ21766
C 84	13.2	18.1	20	1	ABZ98885
C 85	13.2	18.1	20	1	ABZ43679
C 86	13	17.8	17	1	ACA98826
C 87	13	17.8	19	1	ACA98829
C 88	13	17.8	19	1	ACA98829
C 89	12.8	17.5	17	1	ABV83095
C 90	12.8	17.5	17	1	ABV83096
C 91	12.8	17.5	17	1	ABT38079
C 92	12.8	17.5	17	1	ABZ60690
C 93	12.8	17.5	17	1	ABZ43679
C 94	12.8	17.5	18	1	AAV12463
C 95	12.8	17.5	18	1	AAZ41037
C 96	12.8	17.5	18	1	AAZ22131
C 97	12.8	17.5	18	1	ABK88473
C 98	12.8	17.5	18	1	ABK15756
C 99	12.8	17.5	18	1	ABZ57306
C 100	12.8	17.5	18	1	AAV60507
C 101	12.8	17.5	19	1	AAZ75939
C 102	12.4	17.0	15	1	AAV49432
C 103	12.4	17.0	15	1	AAV49431
C 104	12.4	17.0	17	1	ABV83098
C 105	12.4	17.0	17	1	ABV83097
C 106	12.4	17.0	17	1	ABT36385

HBV DNA polymerase  
Mouse Oct 3/4 form  
Forward PCR primer  
Human breast cancer  
Probe HBPr135 for  
Hepatitis B virus  
HBV HBPol/HBsAg re  
Human immunodefici  
Pyrococcus woesei  
Nucleotide sequenc  
PCR primer for DNA  
FEN-1 related DNA  
DNAP-related oligo  
HBV hammerhead rib  
HBV hammerhead rib  
Antisense oligonuc  
Ribonucleotide red  
Zea mays genome fo  
Bacterial cell ide  
Hepatocyte growth  
Hepatocyte growth  
Human MEXK4 antisense  
Murine SAC1 gene-s  
Human JAZF1 PCR pr  
HBV DNA polymerase  
Murine GABA transp  
Human MAPK kinase  
PCR primer used to  
Antisense oligonuc  
Human chromosome 1  
TNFR1 expression m  
Human PD4C oligon  
YacM gene specific  
Retinoblastoma mut  
HBV G-cleaver subs  
HBV inozyme subatr  
Human CYP2C8 SNP d  
Human CYP2C8 SNP d  
Human HD1 antisense  
Human chromosome a  
Probe to human leu  
S. epidermidis 16S  
HIV gag CA and NC  
Mouse haematopoiet  
PCR primer used to  
Haematopoietic mar  
Serine/threonine k  
Human PDE4A oligon  
Human KNSL1 sequen  
Tumour suppression  
Human CYP2C8 SNP d  
Human CYP2C8 SNP d  
Human HTPL scannin  
Human HTPL scannin  
Tumour suppression  
Human K-Ras DNazym  
Human HP4 prostagl  
Cellular inhibitor  
Human c-IAP-2 anti  
PCR primer #2 for  
Human biallelic ma  
IGF-I oligonucleot  
IGF-I oligonucleot  
Human HTPL scannin  
Human HTPL scannin  
Tumour suppression

107	12.4	17.0	17	1	ACDS0661	HBV hammerhead rib	180	11.8	16.2	18	1	AAZ72264	Human biallelic ma
108	12.4	17.0	17	1	ACSG7296	Murine oligonucleo	181	11.8	16.2	18	1	AAA92572	Antisense oligonuc
109	12.4	17.0	17	1	ADB42368	Tumour suppression	182	11.8	16.2	18	1	ABZ10580	Haematopoietic cel
110	12.4	17.0	17	1	ADB40322	Tumour suppression	183	11.8	16.2	18	1	ABZ10579	Haematopoietic cel
111	12.4	17.0	17	1	ADB40653	Tumour suppression	184	11.8	16.2	18	1	ADC70095	Primer oligo used
112	12.4	17.0	17	1	ADB44348	Tumour suppression	185	11.8	16.2	18	1	ADC70094	Primer oligo used
113	12.4	17.0	18	1	AAT09038	Arabidopsis thalia	186	11.8	16.2	18	1	ADB84422	Human lymphoid cel
114	12.4	17.0	18	1	AAO10174	Human anti-angiole	187	11.8	16.2	18	1	ADB84421	Human lymphoid cel
115	12.4	17.0	18	1	ABL41558	Primer #3 related	188	11.6	15.9	17	1	AAQ04084	PCR primer for the
116	12.4	17.0	18	1	ABL41557	Primer #2 related	189	11.6	15.9	17	1	AAQ04084	PCR primer for the
117	12.4	17.0	18	1	AAS16281	Mouse LiCAl cytopl	190	11.4	15.6	13	1	ABC25843	Murine oligonucleo
118	12.4	17.0	19	1	AAQ20515	H-ras ribozyme pro	191	11.4	15.6	13	1	ABC25843	Oligonucleotide SE
119	12.4	17.0	19	1	AAZ72894	Human biallelic ma	192	11.4	15.6	13	1	ABC35597	Oligonucleotide SE
120	12.2	16.7	17	1	AAQ11387	Probe COD 931 spec	193	11.4	15.6	13	1	ABC33003	Oligonucleotide SE
121	12.2	16.7	17	1	AAQ211838	Antisense polyamin	194	11.4	15.6	13	1	ABC54454	Oligonucleotide SE
122	12.2	16.7	17	1	AAQ57302	Enzymatic RNA mole	195	11.4	15.6	13	1	ABC25842	Oligonucleotide SE
123	12.2	16.7	17	1	AAO101734	Peptide nucleic ac	196	11.4	15.6	13	1	ABC40096	Oligonucleotide SE
124	12.2	16.7	17	1	AAO18977	Human TIE-2 substr	197	11.4	15.6	13	1	ABC40097	Oligonucleotide SE
125	12.2	16.7	17	1	AAV93545	Human B-raf substr	198	11.4	15.6	13	1	ABC20177	Oligonucleotide SE
126	12.2	16.7	17	1	AAA36202	Human genomic SNP	199	11.4	15.6	13	1	ABF31356	Oligonucleotide SE
127	12.2	16.7	17	1	ABK56419	Human CiCAl gene e	200	11.4	15.6	13	1	ABF31302	Oligonucleotide SE
128	12.2	16.7	17	1	ABT40203	Tumour suppression	201	11.4	15.6	13	1	ABF31357	Oligonucleotide SE
129	12.2	16.7	17	1	ACD61716	HCV minus strand D	202	11.4	15.6	13	1	ABC35596	Oligonucleotide SE
130	12.2	16.7	17	1	ADB43899	Tumour suppression	203	11.4	15.6	13	1	ABC20176	Oligonucleotide SE
131	12.2	16.7	17	1	ADC04003	Human Na/H exchang	204	11.4	15.6	13	1	ABC54455	Oligonucleotide SE
132	12.2	16.7	17	1	ADC04000	Human Na/H exchang	205	11.4	15.6	13	1	AAT37613	Oligonucleotide SE
133	12.2	16.7	18	1	AAI51196	Triple helix formi	206	11.4	15.6	15	1	AAT37615	Apo(a) mRNA (nt. p
134	12.2	16.7	18	1	AAK61956	Type-specific HPV	207	11.4	15.6	15	1	AAT35030	Apo(a) mRNA (nt. p
135	12.2	16.7	18	1	AAK86642	Cdc 2 kinase hamme	208	11.4	15.6	15	1	AAA34457	Template sequence
136	12.2	16.7	18	1	AAA86643	Cdc 2 kinase hamme	209	11.4	15.6	15	1	AAA26829	Trichosporon aquat
137	12.2	16.7	18	1	AAH61811	Cdc 2 kinase hamme	210	11.4	15.6	15	1	AAAF49433	IGF-I oligonucleot
138	12.2	16.7	18	1	AAH61809	Cdc 2 kinase hamme	211	11.4	15.6	15	1	AAAF49430	IGF-I oligonucleot
139	12.2	16.7	18	1	ACA96645	Human biallelic ma	212	11.4	15.6	15	1	AAF70053	Human TNFRSF11B ge
140	12.2	16.7	18	1	AAZ72820	Human biallelic ma	213	11.4	15.6	15	1	AAAF69384	Human IL4Ralpha ge
141	12.2	16.7	18	1	AAI4539	Tobacco rbcl PCR p	214	11.4	15.6	15	1	AAI57627	Human SCYA24 ASO p
142	12.2	16.7	18	1	AAH61808	Cdc 2 kinase hamme	215	11.4	15.6	17	1	AAA18974	Human TIE-2 substr
143	12.2	16.7	18	1	AAH61809	Cdc 2 kinase hamme	216	11.4	15.6	17	1	AAA20484	Integrin alpha 6 s
144	12.2	16.7	18	1	ACA96651	Antisense inhibiti	217	11.4	15.6	17	1	AAA18976	Human TIE-2 substr
145	12.2	16.7	18	1	AAK94553	23S/16S rRNA dete	218	11.4	15.6	17	1	AAA18975	Integrin alpha 6 s
146	12.2	16.7	18	1	ADB84612	Human mitogen-acti	219	11.4	15.6	17	1	AAA20483	Integrin alpha 6 s
147	12.2	16.7	18	1	ADC98654	Tobacco rbcl PCR p	220	11.4	15.6	17	1	ABK02835	Human CD20 Hammer
148	12.2	16.7	18	1	ABK39583	Oligonucleotide pr	221	11.4	15.6	17	1	ABK03202	Human CD20 Inozyme
149	12.2	16.7	18	1	AAK75500	Human fit-1 and KD	222	11.4	15.6	17	1	ABK25223	Male-sterile plant
150	12.2	16.7	18	1	AAZ65780	Immunosuppressant	223	11.4	15.6	17	1	ABK25224	Male-sterile plant
151	12.2	16.7	18	1	AAZ48241	IGFBP3 oligonucleo	224	11.4	15.6	17	1	ABV83099	Human HTPL scannin
152	12.2	16.7	18	1	AAZ48238	IGFBP3 oligonucleo	225	11.4	15.6	17	1	ACC53051	Human tumour suppr
153	12.2	16.7	18	1	AAZ48239	IGFBP3 oligonucleo	226	11.4	15.6	17	1	ACC53051	Human tumour suppr
154	12.2	16.7	18	1	AAZ48240	IGFBP3 oligonucleo	227	11.4	15.6	17	1	ACC52797	Tumour suppression
155	12.2	16.7	18	1	AAZ48241	IGFBP3 oligonucleo	228	11.4	15.6	17	1	ABT39688	Tumour suppression
156	12.2	16.7	18	1	AAZ68750	Human fit1 VEGF re	229	11.4	15.6	17	1	ABT37482	Tumour suppression
157	12.2	16.7	18	1	AAZ68751	Human fit1 VEGF re	230	11.4	15.6	17	1	ACD50660	HBV hammerhead rib
158	12.2	16.7	18	1	ACC65172	Murine oligonucleo	231	11.4	15.6	17	1	ACD50665	HBV hammerhead rib
159	12.2	16.7	18	1	AAZ30575	Human integrin alp	232	11.4	15.6	17	1	ACD64925	Murine oligonucleo
160	12.2	16.7	18	1	AAZ10237	Antisense oligonuc	233	11.4	15.6	17	1	ADB44108	Tumour suppression
161	11.8	16.2	15	1	AAV48734	IGF-2 gene antis	234	11.4	15.6	17	1	ADB42008	Tumour suppression
162	11.8	16.2	15	1	AAZ52178	IGF-1 oligonucleot	235	11.4	15.6	17	1	ADB45411	Tumour suppression
163	11.8	16.2	16	1	AAI66199	Peptide nucleic ac	236	11.4	15.6	17	1	ADB44471	Tumour suppression
164	11.8	16.2	16	1	ABT14523	Rhesus monkey p-gl	237	11.4	15.6	17	1	ADC70411	Primer oligo used
165	11.8	16.2	16	1	ADP07218	Zoster virus IRF-1	238	11.4	15.6	17	1	ADC70430	PCR primer 2 used
166	11.8	16.2	17	1	AAH81529	Human c-myb hamme	239	11.4	15.6	17	1	ADC70409	Primer oligo used
167	11.8	16.2	17	1	AAH69124	Human fit1 VEGF re	240	11.2	15.3	16	1	AAA40694	Human CD36 polymor
168	11.8	16.2	17	1	AAV11899	L. lactis NS3 locu	241	11.2	15.3	17	1	AAQ36488	Mycoplasma primer/
169	11.8	16.2	17	1	AAA21146	Integrin alpha 6 s	242	11.2	15.3	17	1	AAQ36488	SSP for flavonoid-
170	11.8	16.2	17	1	AAV21147	Integrin alpha 6 s	243	11.2	15.3	17	1	AAQ72496	Melanoma cell line
171	11.8	16.2	17	1	AAV93544	Human B-raf substr	244	11.2	15.3	17	1	AAQ72496	MAGE PCR primer CH
172	11.8	16.2	17	1	AAZ32865	HBV pre-S gene pro	245	11.2	15.3	17	1	AAAT81160	Human c-myb hamme
173	11.8	16.2	17	1	ABK07400	Hammerhead ribozym	246	11.2	15.3	17	1	AAAT81161	Human c-myb hamme
174	11.8	16.2	17	1	ABK03416	Human CD20 G-cleav	247	11.2	15.3	17	1	AAAT81530	Human c-myb hamme
175	11.8	16.2	17	1	ABK02836	Human CD20 Hammer	248	11.2	15.3	17	1	AAZ68824	Human fit1 VEGF re
176	11.8	16.2	17	1	ABK02837	Human CD20 Hammer	249	11.2	15.3	17	1	AAZ68824	Human fit1 VEGF re
177	11.8	16.2	17	1	ABV83094	Human HTPL scannin	250	11.2	15.3	17	1	AAV95714	Solanidine glucosy
178	11.8	16.2	17	1	ABZ60889	Human K-Ras DNazym	251	11.2	15.3	17	1	AAA18559	Human TIE-2 substr
179	11.8	16.2	18	1	AAA55643	TRAP5 antisense ol	252	11.2	15.3	17	1	AAA20759	Integrin alpha 6 s



253	11.2	15.3	17	1	AAV93546	Human B-raf subutr	326	11	15.1	12	1	ABH91814	Oligonucleotide pr
254	11.2	15.3	17	1	AAH84106	PCR primer for MAG	c 327	11	15.1	12	1	ABH75494	Oligonucleotide pr
255	11.2	15.3	17	1	AAAF36536	Human genomic SNP	328	11	15.1	12	1	ABH108662	Oligonucleotide pr
256	11.2	15.3	17	1	AAAF04245	Hammerhead ribozym	329	11	15.1	12	1	ABH71304	Oligonucleotide pr
257	11.2	15.3	17	1	AAAF04693	Hammerhead ribozym	c 330	11	15.1	12	1	ABH161761	Oligonucleotide pr
258	11.2	15.3	17	1	AAH951137	Human Chk1 ribozym	331	11	15.1	12	1	ABH163498	Oligonucleotide pr
259	11.2	15.3	17	1	AAH95658	Human Chk1 ribozym	c 332	11	15.1	12	1	ABH151405	Oligonucleotide pr
260	11.2	15.3	17	1	ABK02974	Human CD20 Hammerh	c 333	11	15.1	12	1	ABH171629	Oligonucleotide pr
261	11.2	15.3	17	1	ABK02975	Human CD20 Hammerh	334	11	15.1	12	1	ABH44106	Oligonucleotide pr
262	11.2	15.3	17	1	ABK03537	Human CD20 Zinzyme	335	11	15.1	12	1	ABH157944	Oligonucleotide pr
263	11.2	15.3	17	1	ABK07091	Human GDMPLP-1 17-m	336	11	15.1	12	1	ABH108661	Oligonucleotide pr
264	11.2	15.3	17	1	ABK07092	Human GDMPLP-1 17-m	337	11	15.1	13	1	ABH78022	Oligonucleotide SE
265	11.2	15.3	17	1	ABH85535	Human pp-GaNTase 1	c 338	11	15.1	13	1	ABH71907	Oligonucleotide SE
266	11.2	15.3	17	1	ABH85536	Human pp-GaNTase 1	c 339	11	15.1	13	1	ABH71907	Oligonucleotide SE
267	11.2	15.3	17	1	ABK25932	Amino acid overpro	340	11	15.1	13	1	ABH71907	Oligonucleotide SE
268	11.2	15.3	17	1	ABK25932	Amino acid overpro	341	11	15.1	13	1	ABH16022	Oligonucleotide SE
269	11.2	15.3	17	1	ABH82837	Human HTPL scannin	c 342	11	15.1	13	1	ABH12113	Oligonucleotide SE
270	11.2	15.3	17	1	ABH82836	Human HTPL scannin	c 343	11	15.1	13	1	ABH84807	Oligonucleotide SE
271	11.2	15.3	17	1	ABK18613	Human ERG G-cleave	344	11	15.1	13	1	ABH72133	Oligonucleotide SE
272	11.2	15.3	17	1	ABK19015	Human ERG DNazyme	345	11	15.1	13	1	ABH71906	Oligonucleotide SE
273	11.2	15.3	17	1	ABK18354	Human ERG DNazyme	346	11	15.1	13	1	ABH71906	Oligonucleotide SE
274	11.2	15.3	17	1	ABH75096	Human PAPP-Ea asso	c 347	11	15.1	13	1	ABH47707	Oligonucleotide SE
275	11.2	15.3	17	1	ABH75096	Human PAPP-Ea asso	348	11	15.1	13	1	ABH47707	Oligonucleotide SE
276	11.2	15.3	17	1	ABK56283	Human CLCA1 gene e	c 349	11	15.1	13	1	ABH77165	Oligonucleotide SE
277	11.2	15.3	17	1	ABK56283	Human CLCA1 gene e	350	11	15.1	13	1	ABH12112	Oligonucleotide SE
278	11.2	15.3	17	1	ABK56418	Human CLCA1 gene e	c 351	11	15.1	13	1	ABH48209	Oligonucleotide SE
279	11.2	15.3	17	1	ABK56449	Human CLCA1 gene e	352	11	15.1	13	1	ABH47706	Oligonucleotide SE
280	11.2	15.3	17	1	ACC52807	Human tumour suppr	c 353	11	15.1	13	1	ABH47706	Oligonucleotide SE
281	11.2	15.3	17	1	ACC52527	Human tumour suppr	c 354	11	15.1	13	1	ABH72132	Oligonucleotide SE
282	11.2	15.3	17	1	ACC54448	Human tumour suppr	355	11	15.1	13	1	ABH72132	Oligonucleotide SE
283	11.2	15.3	17	1	ACC52830	Human tumour suppr	c 356	11	15.1	13	1	ABH72132	Oligonucleotide SE
284	11.2	15.3	17	1	ABH36991	Tumour suppression	357	11	15.1	13	1	ABH72132	Oligonucleotide SE
285	11.2	15.3	17	1	ABH36991	Tumour suppression	c 358	11	15.1	13	1	ABH72132	Oligonucleotide SE
286	11.2	15.3	17	1	ABH36991	Tumour suppression	359	11	15.1	15	1	AAH48237	IGFBP3 oligonucleo
287	11.2	15.3	17	1	ABH36991	Tumour suppression	c 360	11	15.1	15	1	AAH48237	IGFBP3 oligonucleo
288	11.2	15.3	17	1	ABH36991	Tumour suppression	c 361	11	15.1	15	1	AAH48237	IGFBP3 oligonucleo
289	11.2	15.3	17	1	ABH36991	Tumour suppression	c 362	11	15.1	15	1	AAH48237	IGFBP3 oligonucleo
290	11.2	15.3	17	1	ABH36991	Tumour suppression	363	11	15.1	16	1	AAH48237	IGFBP3 oligonucleo
291	11.2	15.3	17	1	ABH36991	Tumour suppression	364	10.8	14.8	14	1	AAQ68033	Human NPYR gene a
292	11.2	15.3	17	1	ABH36991	Tumour suppression	365	10.8	14.8	14	1	AAQ68033	Human NPYR gene a
293	11.2	15.3	17	1	ABH36991	Tumour suppression	c 366	10.8	14.8	14	1	AAQ68033	Human NPYR gene a
294	11.2	15.3	17	1	ABH36991	Tumour suppression	c 367	10.8	14.8	15	1	AAQ55453	Probe for HCV geno
295	11.2	15.3	17	1	ABH36991	Tumour suppression	c 368	10.8	14.8	15	1	AAQ55453	Probe for HCV geno
296	11.2	15.3	17	1	ABH36991	Tumour suppression	c 369	10.8	14.8	15	1	AAQ55453	Probe for HCV geno
297	11.2	15.3	17	1	ABH36991	Tumour suppression	370	10.8	14.8	15	1	AAQ55453	Probe for HCV geno
298	11.2	15.3	17	1	ABH36991	Tumour suppression	c 371	10.8	14.8	15	1	AAQ55453	Probe for HCV geno
299	11.2	15.3	17	1	ABH36991	Tumour suppression	c 372	10.8	14.8	15	1	AAQ55453	Probe for HCV geno
300	11.2	15.3	17	1	ABH36991	Tumour suppression	c 373	10.8	14.8	15	1	AAQ55453	Probe for HCV geno
301	11.2	15.3	17	1	ABH36991	Tumour suppression	c 374	10.8	14.8	15	1	AAQ55453	Probe for HCV geno
302	11.2	15.3	17	1	ABH36991	Tumour suppression	375	10.8	14.8	15	1	AAQ55453	Probe for HCV geno
303	11.2	15.3	17	1	ABH36991	Tumour suppression	c 376	10.8	14.8	15	1	AAQ55453	Probe for HCV geno
304	11.2	15.3	17	1	ABH36991	Tumour suppression	c 377	10.8	14.8	15	1	AAQ55453	Probe for HCV geno
305	11.2	15.3	17	1	ABH36991	Tumour suppression	c 378	10.8	14.8	15	1	AAQ55453	Probe for HCV geno
306	11.2	15.3	17	1	ABH36991	Tumour suppression	c 379	10.8	14.8	15	1	AAQ55453	Probe for HCV geno
307	11.2	15.3	17	1	ABH36991	Tumour suppression	380	10.8	14.8	15	1	AAQ55453	Probe for HCV geno
308	11.2	15.3	17	1	ABH36991	Tumour suppression	c 381	10.8	14.8	15	1	AAQ55453	Probe for HCV geno
309	11.2	15.3	17	1	ABH36991	Tumour suppression	382	10.8	14.8	15	1	AAQ55453	Probe for HCV geno
310	11.2	15.3	17	1	ABH36991	Tumour suppression	c 383	10.8	14.8	15	1	AAQ55453	Probe for HCV geno
311	11.2	15.3	17	1	ABH36991	Tumour suppression	c 384	10.8	14.8	15	1	AAQ55453	Probe for HCV geno
312	11.2	15.3	17	1	ABH36991	Tumour suppression	385	10.8	14.8	15	1	AAQ55453	Probe for HCV geno
313	11.2	15.3	17	1	ABH36991	Tumour suppression	c 386	10.8	14.8	16	1	AAQ55453	Probe for HCV geno
314	11.2	15.3	17	1	ABH36991	Tumour suppression	387	10.6	14.5	15	1	AAQ55453	Probe for HCV geno
315	11.2	15.3	17	1	ABH36991	Tumour suppression	c 388	10.6	14.5	15	1	AAQ55453	Probe for HCV geno
316	11.2	15.3	17	1	ABH36991	Tumour suppression	389	10.4	14.2	12	1	AAQ55453	Probe for HCV geno
317	11.2	15.3	17	1	ABH36991	Tumour suppression	c 390	10.4	14.2	12	1	AAQ55453	Probe for HCV geno
318	11.2	15.3	17	1	ABH36991	Tumour suppression	391	10.4	14.2	12	1	AAQ55453	Probe for HCV geno
319	11.2	15.3	17	1	ABH36991	Tumour suppression	c 392	10.4	14.2	12	1	AAQ55453	Probe for HCV geno
320	11.2	15.3	17	1	ABH36991	Tumour suppression	c 393	10.4	14.2	12	1	AAQ55453	Probe for HCV geno
321	11.2	15.3	17	1	ABH36991	Tumour suppression	c 394	10.4	14.2	12	1	AAQ55453	Probe for HCV geno
322	11.2	15.3	17	1	ABH36991	Tumour suppression	c 395	10.4	14.2	12	1	AAQ55453	Probe for HCV geno
323	11.2	15.3	17	1	ABH36991	Tumour suppression	c 396	10.4	14.2	12	1	AAQ55453	Probe for HCV geno
324	11.2	15.3	17	1	ABH36991	Tumour suppression	397	10.4	14.2	12	1	AAQ55453	Probe for HCV geno
325	11.2	15.3	17	1	ABH36991	Tumour suppression	c 398	10.4	14.2	12	1	AAQ55453	Probe for HCV geno

c 399	10.4	14.2	1	ABI43942	Oligonucleotide pr	472	10.4	14.2	13	1	ABH47937	Oligonucleotide SE
c 400	10.4	14.2	12	ABH80382	Oligonucleotide pr	c 473	10.4	14.2	13	1	ABH61175	Oligonucleotide SE
c 401	10.4	14.2	12	ABI07550	Oligonucleotide pr	474	10.4	14.2	13	1	ABC34963	Oligonucleotide SE
c 402	10.4	14.2	12	ABI61878	Oligonucleotide pr	475	10.4	14.2	13	1	ABC36751	Oligonucleotide SE
c 403	10.4	14.2	12	ABH69318	Oligonucleotide pr	476	10.4	14.2	13	1	ABF23706	Oligonucleotide SE
c 404	10.4	14.2	12	ABI37814	Oligonucleotide pr	477	10.4	14.2	13	1	ABF40512	Oligonucleotide SE
c 405	10.4	14.2	12	ABH92546	Oligonucleotide pr	478	10.4	14.2	13	1	ABF99637	Oligonucleotide SE
c 406	10.4	14.2	12	ABH73116	Oligonucleotide pr	c 479	10.4	14.2	13	1	ABH04824	Oligonucleotide SE
c 407	10.4	14.2	12	ABI48535	Oligonucleotide pr	480	10.4	14.2	13	1	ABH56098	Oligonucleotide SE
c 408	10.4	14.2	12	ABI62627	Oligonucleotide pr	c 481	10.4	14.2	13	1	ABC74753	Oligonucleotide SE
c 409	10.4	14.2	12	ABH68474	Oligonucleotide pr	482	10.4	14.2	13	1	ABC50230	Oligonucleotide SE
c 410	10.4	14.2	12	ABH69840	Oligonucleotide pr	483	10.4	14.2	13	1	ABF09634	Oligonucleotide SE
c 411	10.4	14.2	12	ABI30473	Oligonucleotide pr	c 484	10.4	14.2	13	1	ABF09635	Oligonucleotide SE
c 412	10.4	14.2	12	ABI58887	Oligonucleotide pr	485	10.4	14.2	13	1	ABF36472	Oligonucleotide SE
c 413	10.4	14.2	12	ABI66382	Oligonucleotide pr	c 486	10.4	14.2	13	1	ABF36891	Oligonucleotide SE
c 414	10.4	14.2	12	ABH69400	Oligonucleotide pr	c 487	10.4	14.2	13	1	ABH42355	Oligonucleotide SE
c 415	10.4	14.2	12	ABH74885	Oligonucleotide pr	c 488	10.4	14.2	13	1	ABH45260	Oligonucleotide SE
c 416	10.4	14.2	12	ABH91639	Oligonucleotide pr	c 489	10.4	14.2	13	1	ABH47936	Oligonucleotide SE
c 417	10.4	14.2	12	ABI64573	Oligonucleotide pr	c 490	10.4	14.2	13	1	ABH50149	Oligonucleotide SE
c 418	10.4	14.2	12	ABI23775	Oligonucleotide pr	491	10.4	14.2	13	1	ABC52085	Oligonucleotide SE
c 419	10.4	14.2	12	ABH77314	Oligonucleotide pr	c 492	10.4	14.2	13	1	ABF07412	Oligonucleotide SE
c 420	10.4	14.2	12	ABH83110	Oligonucleotide pr	c 493	10.4	14.2	13	1	ABC09472	Oligonucleotide SE
c 421	10.4	14.2	12	ABH84313	Oligonucleotide pr	494	10.4	14.2	13	1	ABC64765	Oligonucleotide SE
c 422	10.4	14.2	12	ABI41641	Oligonucleotide pr	495	10.4	14.2	13	1	ABC64764	Oligonucleotide SE
c 423	10.4	14.2	12	ABI51169	Oligonucleotide pr	c 496	10.4	14.2	13	1	ABC64764	Oligonucleotide SE
c 424	10.4	14.2	12	ABI70333	Oligonucleotide pr	c 497	10.4	14.2	13	1	ABF50858	Oligonucleotide SE
c 425	10.4	14.2	12	ABI60448	Oligonucleotide pr	c 498	10.4	14.2	13	1	ABF50861	Oligonucleotide SE
c 426	10.4	14.2	12	ABI75562	Oligonucleotide pr	c 499	10.4	14.2	13	1	ABH03631	Oligonucleotide SE
c 427	10.4	14.2	12	ABH67612	Oligonucleotide pr	c 500	10.4	14.2	13	1	ABH34475	Oligonucleotide SE
c 428	10.4	14.2	12	ABX03851	Oligonucleotide pr	c 501	10.4	14.2	13	1	ABF91623	Oligonucleotide SE
c 429	10.4	14.2	12	ABX79961	DNA encoding secre	c 502	10.4	14.2	13	1	ABH56099	Oligonucleotide SE
c 430	10.4	14.2	13	AAQ25461	Purine rich HPV-11	c 503	10.4	14.2	13	1	ABH44103	Oligonucleotide SE
c 431	10.4	14.2	13	AAT90162	Fluorodated peptid	c 504	10.4	14.2	13	1	ABF11630	Oligonucleotide SE
c 432	10.4	14.2	13	ABC19743	Oligonucleotide SE	c 505	10.4	14.2	13	1	ABF36473	Oligonucleotide SE
c 433	10.4	14.2	13	ABC00010	Oligonucleotide SE	c 506	10.4	14.2	13	1	ABF40515	Oligonucleotide SE
c 434	10.4	14.2	13	ABF50860	Oligonucleotide SE	c 507	10.4	14.2	13	1	ABH24395	Oligonucleotide SE
c 435	10.4	14.2	13	ABH04825	Oligonucleotide SE	c 508	10.4	14.2	13	1	ABF78890	Oligonucleotide SE
c 436	10.4	14.2	13	ABC68408	Oligonucleotide SE	c 509	10.4	14.2	13	1	ABF85739	Oligonucleotide SE
c 437	10.4	14.2	13	ABF07410	Oligonucleotide SE	c 510	10.4	14.2	13	1	ABH14931	Oligonucleotide SE
c 438	10.4	14.2	13	ABF07411	Oligonucleotide SE	c 511	10.4	14.2	13	1	ABC69764	Oligonucleotide SE
c 439	10.4	14.2	13	ABC09473	Oligonucleotide SE	c 512	10.4	14.2	13	1	ABC52084	Oligonucleotide SE
c 440	10.4	14.2	13	ABF68455	Oligonucleotide SE	c 513	10.4	14.2	13	1	ABC05074	Oligonucleotide SE
c 441	10.4	14.2	13	ABH19299	Oligonucleotide SE	c 514	10.4	14.2	13	1	ABF11631	Oligonucleotide SE
c 442	10.4	14.2	13	ABH35545	Oligonucleotide SE	c 515	10.4	14.2	13	1	ABC36748	Oligonucleotide SE
c 443	10.4	14.2	13	ABC44102	Oligonucleotide SE	c 516	10.4	14.2	13	1	ABH35544	Oligonucleotide SE
c 444	10.4	14.2	13	ABC44654	Oligonucleotide SE	c 517	10.4	14.2	13	1	ABF91622	Oligonucleotide SE
c 445	10.4	14.2	13	ABF36890	Oligonucleotide SE	c 518	10.4	14.2	13	1	ABC45674	Oligonucleotide SE
c 446	10.4	14.2	13	ABF58614	Oligonucleotide SE	c 519	10.4	14.2	13	1	ABF40513	Oligonucleotide SE
c 447	10.4	14.2	13	ABC68409	Oligonucleotide SE	c 520	10.4	14.2	13	1	ABH23547	Oligonucleotide SE
c 448	10.4	14.2	13	ABC61494	Oligonucleotide SE	c 521	10.4	14.2	13	1	ABH24394	Oligonucleotide SE
c 449	10.4	14.2	13	ABC61495	Oligonucleotide SE	c 522	10.4	14.2	13	1	ABF55253	Oligonucleotide SE
c 450	10.4	14.2	13	ABF23707	Oligonucleotide SE	c 523	10.4	14.2	13	1	ABC59765	Oligonucleotide SE
c 451	10.4	14.2	13	ABH19336	Oligonucleotide SE	c 524	10.4	14.2	13	1	ABH14930	Oligonucleotide SE
c 452	10.4	14.2	13	ABF73676	Oligonucleotide SE	c 525	10.4	14.2	13	1	ABH46806	Oligonucleotide SE
c 453	10.4	14.2	13	ABF58615	Oligonucleotide SE	c 526	10.4	14.2	13	1	ABC43329	Oligonucleotide SE
c 454	10.4	14.2	13	ABH35606	Oligonucleotide SE	c 527	10.4	14.2	13	1	ABC59765	Oligonucleotide SE
c 455	10.4	14.2	13	ABC43328	Oligonucleotide SE	c 528	10.4	14.2	13	1	ABC99594	Oligonucleotide SE
c 456	10.4	14.2	13	ABC50231	Oligonucleotide SE	c 529	10.4	14.2	13	1	ABC35286	Oligonucleotide SE
c 457	10.4	14.2	13	ABF26824	Oligonucleotide SE	c 530	10.4	14.2	13	1	ABF40514	Oligonucleotide SE
c 458	10.4	14.2	13	ABF26825	Oligonucleotide SE	c 531	10.4	14.2	13	1	ABH19337	Oligonucleotide SE
c 459	10.4	14.2	13	ABH19298	Oligonucleotide SE	c 532	10.4	14.2	13	1	ABF50862	Oligonucleotide SE
c 460	10.4	14.2	13	ABF99636	Oligonucleotide SE	c 533	10.4	14.2	13	1	ABH27937	Oligonucleotide SE
c 461	10.4	14.2	13	ABF50859	Oligonucleotide SE	c 534	10.4	14.2	13	1	ABF78891	Oligonucleotide SE
c 462	10.4	14.2	13	ABF50863	Oligonucleotide SE	c 535	10.4	14.2	13	1	ABF85738	Oligonucleotide SE
c 463	10.4	14.2	13	ABF50863	Oligonucleotide SE	c 536	10.4	14.2	13	1	ABH38188	Oligonucleotide SE
c 464	10.4	14.2	13	ABH61174	Oligonucleotide SE	c 537	10.4	14.2	13	1	ABH45261	Oligonucleotide SE
c 465	10.4	14.2	13	ABC44655	Oligonucleotide SE	c 538	10.4	14.2	13	1	ABC19742	Oligonucleotide SE
c 466	10.4	14.2	13	ABC99595	Oligonucleotide SE	c 539	10.4	14.2	13	1	ABC45675	Oligonucleotide SE
c 467	10.4	14.2	13	ABC00011	Oligonucleotide SE	c 540	10.4	14.2	13	1	ABC74752	Oligonucleotide SE
c 468	10.4	14.2	13	ABC36750	Oligonucleotide SE	c 541	10.4	14.2	13	1	ABC34962	Oligonucleotide SE
c 469	10.4	14.2	13	ABF41201	Oligonucleotide SE	c 542	10.4	14.2	13	1	ABC35287	Oligonucleotide SE
c 470	10.4	14.2	13	ABH27936	Oligonucleotide SE	c 543	10.4	14.2	13	1	ABF41200	Oligonucleotide SE
c 471	10.4	14.2	13	ABH38189	Oligonucleotide SE	544	10.4	14.2	13	1	ABF68454	Oligonucleotide SE

c 545	10.4	14.2	13	1	ABF95990	Oligonucleotide SE	c 618	10.2	14.0	15	1	AAF52585	IGF-I oligonucleot
c 546	10.4	14.2	13	1	ABF95991	Oligonucleotide SE	619	10.2	14.0	15	1	AAF53512	IGF-I oligonucleot
c 547	10.4	14.2	13	1	ABF95994	Oligonucleotide SE	620	10.2	14.0	15	1	AAF50426	IGF-I oligonucleot
c 548	10.4	14.2	13	1	ABH23546	Oligonucleotide SE	621	10.2	14.0	15	1	AAF50427	IGF-I oligonucleot
c 549	10.4	14.2	13	1	ABF73677	Oligonucleotide SE	622	10.2	14.0	15	1	AAF53501	IGF-I oligonucleot
c 550	10.4	14.2	13	1	ABH00190	Oligonucleotide SE	623	10.2	14.0	15	1	AAF47198	IGFBP3 oligonucleo
c 551	10.4	14.2	13	1	ABH00191	Oligonucleotide SE	624	10.2	14.0	15	1	AAF48479	IGFBP3 oligonucleo
c 552	10.4	14.2	13	1	ABH46807	Oligonucleotide SE	625	10.2	14.0	15	1	AAF48478	IGFBP3 oligonucleo
c 553	10.4	14.2	13	1	ABC05075	Oligonucleotide SE	626	10.2	14.0	15	1	AAF51294	IGF-I oligonucleot
c 554	10.4	14.2	13	1	ABF07413	Oligonucleotide SE	627	10.2	14.0	15	1	AAF50092	IGF-I oligonucleot
c 555	10.4	14.2	13	1	ABF95995	Oligonucleotide SE	628	10.2	14.0	15	1	AAF48963	IGFBP3 oligonucleo
c 556	10.4	14.2	13	1	ABH03630	Oligonucleotide SE	629	10.2	14.0	15	1	AAF53513	IGF-I oligonucleot
c 557	10.4	14.2	13	1	ABF52522	Oligonucleotide SE	630	10.2	14.0	15	1	AAF49077	IGF-I oligonucleot
c 558	10.4	14.2	13	1	ABH42354	Oligonucleotide SE	631	10.2	14.0	15	1	AAF47623	IGFBP3 oligonucleo
c 559	10.4	14.2	13	1	ABH50148	Oligonucleotide SE	632	10.2	14.0	15	1	AAF51293	IGF-I oligonucleot
c 560	10.4	14.2	13	1	ABH50148	Oligonucleotide SE	633	10.2	14.0	15	1	AAF51294	IGF-I oligonucleot
c 561	10.4	14.2	15	1	AAQ554837	Cloning site produ	634	10.2	14.0	15	1	ABX04014	Resistance gene er
c 562	10.4	14.2	15	1	AAQ54837	Sequence of oligo	635	10.2	14.0	15	1	ABK23841	E. coli OmpA stron
c 563	10.4	14.2	15	1	AAT54622	Mouse IL-5 hammerh	636	10.2	14.0	15	1	ABL59135	Molecular antigen
c 564	10.4	14.2	15	1	AAT54624	Mouse IL-5 hammerh	637	10.2	14.0	15	1	ABL59137	PCR primer A-Au f
c 565	10.4	14.2	15	1	AAT33389	Human vascular end	638	10.2	14.0	15	1	ABL59135	PCR primer A-Au f
c 566	10.4	14.2	15	1	AAT48404	Oligonucleotide H-	639	10.2	14.0	15	1	ABK23841	Molecular antigen
c 567	10.4	14.2	15	1	AAT37305	GnRH receptor cion	640	10.2	14.0	15	1	ABK23841	PCR primer A-Au f
c 568	10.4	14.2	15	1	AAZ75708	Human flt-1 and KD	641	10.2	14.0	15	1	ABK23841	Molecular antigen
c 569	10.4	14.2	15	1	AAZ76412	Human endothelin-1	642	10.2	14.0	15	1	ABK23841	PCR primer A-Au f
c 570	10.4	14.2	15	1	AAZ54195	Human endothelin-1	643	10.2	14.0	15	1	ABK23841	Molecular antigen
c 571	10.4	14.2	15	1	AAZ54205	Human endothelin-1	644	10.2	14.0	15	1	ABK23841	PCR primer A-Au f
c 572	10.4	14.2	15	1	AAA33639	Low adenosine anti	645	10.2	14.0	15	1	ABK23841	Molecular antigen
c 573	10.4	14.2	15	1	AAZ64176	Substrate for hamm	646	10.2	14.0	15	1	ABK23841	PCR primer A-Au f
c 574	10.4	14.2	15	1	AAZ64176	Substrate for hamm	647	10.2	14.0	15	1	ABK23841	Molecular antigen
c 575	10.4	14.2	15	1	AAZ64176	Substrate for hamm	648	10.2	14.0	15	1	ABK23841	PCR primer A-Au f
c 576	10.4	14.2	15	1	AAZ64176	Substrate for hamm	649	10.2	14.0	15	1	ABK23841	Molecular antigen
c 577	10.4	14.2	15	1	AAZ64176	Substrate for hamm	650	10.2	14.0	15	1	ABK23841	PCR primer A-Au f
c 578	10.4	14.2	15	1	AAZ64176	Substrate for hamm	651	10.2	14.0	15	1	ABK23841	Molecular antigen
c 579	10.4	14.2	15	1	AAZ64176	Substrate for hamm	652	10.2	14.0	15	1	ABK23841	PCR primer A-Au f
c 580	10.4	14.2	15	1	AAZ64176	Substrate for hamm	653	10.2	14.0	15	1	ABK23841	Molecular antigen
c 581	10.4	14.2	15	1	AAZ64176	Substrate for hamm	654	10.2	14.0	15	1	ABK23841	PCR primer A-Au f
c 582	10.4	14.2	15	1	AAZ64176	Substrate for hamm	655	10.2	14.0	15	1	ABK23841	Molecular antigen
c 583	10.4	14.2	15	1	AAZ64176	Substrate for hamm	656	10.2	14.0	15	1	ABK23841	PCR primer A-Au f
c 584	10.4	14.2	15	1	AAZ64176	Substrate for hamm	657	10.2	14.0	15	1	ABK23841	Molecular antigen
c 585	10.4	14.2	15	1	AAZ64176	Substrate for hamm	658	10.2	14.0	15	1	ABK23841	PCR primer A-Au f
c 586	10.4	14.2	15	1	AAZ64176	Substrate for hamm	659	10.2	14.0	15	1	ABK23841	Molecular antigen
c 587	10.4	14.2	15	1	AAZ64176	Substrate for hamm	660	10.2	14.0	15	1	ABK23841	PCR primer A-Au f
c 588	10.4	14.2	15	1	AAZ64176	Substrate for hamm	661	10.2	14.0	15	1	ABK23841	Molecular antigen
c 589	10.4	14.2	15	1	AAZ64176	Substrate for hamm	662	10.2	14.0	15	1	ABK23841	PCR primer A-Au f
c 590	10.4	14.2	15	1	AAZ64176	Substrate for hamm	663	10.2	14.0	15	1	ABK23841	Molecular antigen
c 591	10.4	14.2	15	1	AAZ64176	Substrate for hamm	664	10.2	14.0	15	1	ABK23841	PCR primer A-Au f
c 592	10.4	14.2	15	1	AAZ64176	Substrate for hamm	665	10.2	14.0	15	1	ABK23841	Molecular antigen
c 593	10.4	14.2	15	1	AAZ64176	Substrate for hamm	666	10.2	14.0	15	1	ABK23841	PCR primer A-Au f
c 594	10.4	14.2	15	1	AAZ64176	Substrate for hamm	667	10.2	14.0	15	1	ABK23841	Molecular antigen
c 595	10.4	14.2	15	1	AAZ64176	Substrate for hamm	668	10.2	14.0	15	1	ABK23841	PCR primer A-Au f
c 596	10.4	14.2	15	1	AAZ64176	Substrate for hamm	669	10.2	14.0	15	1	ABK23841	Molecular antigen
c 597	10.4	14.2	15	1	AAZ64176	Substrate for hamm	670	10.2	14.0	15	1	ABK23841	PCR primer A-Au f
c 598	10.4	14.2	15	1	AAZ64176	Substrate for hamm	671	10.2	14.0	15	1	ABK23841	Molecular antigen
c 599	10.4	14.2	15	1	AAZ64176	Substrate for hamm	672	10.2	14.0	15	1	ABK23841	PCR primer A-Au f
c 600	10.4	14.2	15	1	AAZ64176	Substrate for hamm	673	10.2	14.0	15	1	ABK23841	Molecular antigen
c 601	10.4	14.2	15	1	AAZ64176	Substrate for hamm	674	10.2	14.0	15	1	ABK23841	PCR primer A-Au f
c 602	10.4	14.2	15	1	AAZ64176	Substrate for hamm	675	10.2	14.0	15	1	ABK23841	Molecular antigen
c 603	10.4	14.2	15	1	AAZ64176	Substrate for hamm	676	10.2	14.0	15	1	ABK23841	PCR primer A-Au f
c 604	10.4	14.2	15	1	AAZ64176	Substrate for hamm	677	10.2	14.0	15	1	ABK23841	Molecular antigen
c 605	10.4	14.2	15	1	AAZ64176	Substrate for hamm	678	10.2	14.0	15	1	ABK23841	PCR primer A-Au f
c 606	10.4	14.2	15	1	AAZ64176	Substrate for hamm	679	10.2	14.0	15	1	ABK23841	Molecular antigen
c 607	10.2	14.0	15	1	AAZ64176	Substrate for hamm	680	10.2	14.0	15	1	ABK23841	PCR primer A-Au f
c 608	10.2	14.0	15	1	AAZ64176	Substrate for hamm	681	10.2	14.0	15	1	ABK23841	Molecular antigen
c 609	10.2	14.0	15	1	AAZ64176	Substrate for hamm	682	10.2	14.0	15	1	ABK23841	PCR primer A-Au f
c 610	10.2	14.0	15	1	AAZ64176	Substrate for hamm	683	10.2	14.0	15	1	ABK23841	Molecular antigen
c 611	10.2	14.0	15	1	AAZ64176	Substrate for hamm	684	10.2	14.0	15	1	ABK23841	PCR primer A-Au f
c 612	10.2	14.0	15	1	AAZ64176	Substrate for hamm	685	10.2	14.0	15	1	ABK23841	Molecular antigen
c 613	10.2	14.0	15	1	AAZ64176	Substrate for hamm	686	10.2	14.0	15	1	ABK23841	PCR primer A-Au f
c 614	10.2	14.0	15	1	AAZ64176	Substrate for hamm	687	10.2	14.0	15	1	ABK23841	Molecular antigen
c 615	10.2	14.0	15	1	AAZ64176	Substrate for hamm	688	10.2	14.0	15	1	ABK23841	PCR primer A-Au f
c 616	10.2	14.0	15	1	AAZ64176	Substrate for hamm	689	10.2	14.0	15	1	ABK23841	Molecular antigen
c 617	10.2	14.0	15	1	AAZ64176	Substrate for hamm	690	10.2	14.0	15	1	ABK23841	PCR primer A-Au f

691	10	13.7	12	1	ABI59029	Oligonucleotide pr	764	10	13.7	13	1	ABCI9220	Oligonucleotide SE
692	10	13.7	12	1	ABI63458	Oligonucleotide pr	765	10	13.7	13	1	ABC11701	Oligonucleotide SE
693	10	13.7	12	1	ABI63849	Oligonucleotide pr	766	10	13.7	13	1	ABC59028	Oligonucleotide SE
694	10	13.7	12	1	ABH99357	Oligonucleotide pr	767	10	13.7	13	1	ABC53039	Oligonucleotide SE
695	10	13.7	12	1	ABI46660	Oligonucleotide pr	768	10	13.7	13	1	ABC85749	Oligonucleotide SE
696	10	13.7	12	1	ABI21238	Oligonucleotide pr	769	10	13.7	13	1	ABC86878	Oligonucleotide SE
697	10	13.7	12	1	ABI46731	Oligonucleotide pr	770	10	13.7	13	1	ABF18110	Oligonucleotide SE
698	10	13.7	12	1	ABI49907	Oligonucleotide pr	771	10	13.7	13	1	ABF18111	Oligonucleotide SE
699	10	13.7	12	1	ABI30324	Oligonucleotide pr	772	10	13.7	13	1	ABF36795	Oligonucleotide SE
700	10	13.7	12	1	ABH96027	Oligonucleotide pr	773	10	13.7	13	1	ABF38702	Oligonucleotide SE
701	10	13.7	12	1	ABI26759	Oligonucleotide pr	774	10	13.7	13	1	ABH22127	Oligonucleotide SE
702	10	13.7	12	1	ABI56394	Oligonucleotide pr	775	10	13.7	13	1	ABF52554	Oligonucleotide SE
703	10	13.7	12	1	ABI63850	Oligonucleotide pr	776	10	13.7	13	1	ABC47694	Oligonucleotide SE
704	10	13.7	12	1	ABH69829	Oligonucleotide pr	777	10	13.7	13	1	ABC27054	Oligonucleotide SE
705	10	13.7	12	1	ABI73953	Oligonucleotide pr	778	10	13.7	13	1	ABC88696	Oligonucleotide SE
706	10	13.7	12	1	ABI31508	Oligonucleotide pr	779	10	13.7	13	1	ABF36794	Oligonucleotide SE
707	10	13.7	12	1	ABI73820	Oligonucleotide pr	780	10	13.7	13	1	ABH22126	Oligonucleotide SE
708	10	13.7	12	1	ABI03883	Oligonucleotide pr	781	10	13.7	13	1	ABF80421	Oligonucleotide SE
709	10	13.7	12	1	ABI10334	Oligonucleotide pr	782	10	13.7	13	1	ABH54691	Oligonucleotide SE
710	10	13.7	12	1	ABI68556	Oligonucleotide pr	783	10	13.7	13	1	ABC52262	Oligonucleotide SE
711	10	13.7	12	1	ABI36452	Oligonucleotide pr	784	10	13.7	13	1	ABC88697	Oligonucleotide SE
712	10	13.7	12	1	ABH91718	Oligonucleotide pr	785	10	13.7	13	1	ABF13833	Oligonucleotide SE
713	10	13.7	13	1	ABC85748	Oligonucleotide SE	786	10	13.7	13	1	ABF25029	Oligonucleotide SE
714	10	13.7	13	1	ABF38703	Oligonucleotide SE	787	10	13.7	13	1	ABF26974	Oligonucleotide SE
715	10	13.7	13	1	ABH04494	Oligonucleotide SE	788	10	13.7	13	1	ABF26975	Oligonucleotide SE
716	10	13.7	13	1	ABF80945	Oligonucleotide SE	789	10	13.7	13	1	ABF35913	Oligonucleotide SE
717	10	13.7	13	1	ABC45854	Oligonucleotide SE	790	10	13.7	13	1	ABH22125	Oligonucleotide SE
718	10	13.7	13	1	ABC47695	Oligonucleotide SE	791	10	13.7	13	1	ABH02152	Oligonucleotide SE
719	10	13.7	13	1	ABF02349	Oligonucleotide SE	792	10	13.7	13	1	ABH04495	Oligonucleotide SE
720	10	13.7	13	1	ABF04505	Oligonucleotide SE	793	10	13.7	13	1	ABH59078	Oligonucleotide SE
721	10	13.7	13	1	ABC54943	Oligonucleotide SE	794	10	13.7	13	1	ABCI9221	Oligonucleotide SE
722	10	13.7	13	1	ABF09013	Oligonucleotide SE	795	10	13.7	13	1	ABC44938	Oligonucleotide SE
723	10	13.7	13	1	ABC59029	Oligonucleotide SE	796	10	13.7	13	1	ABC45855	Oligonucleotide SE
724	10	13.7	13	1	ABC63810	Oligonucleotide SE	797	10	13.7	13	1	ABC50965	Oligonucleotide SE
725	10	13.7	13	1	ABF45133	Oligonucleotide SE	798	10	13.7	13	1	ABC03477	Oligonucleotide SE
726	10	13.7	13	1	ABH20194	Oligonucleotide SE	799	10	13.7	13	1	ABC55957	Oligonucleotide SE
727	10	13.7	13	1	ABH03510	Oligonucleotide SE	800	10	13.7	13	1	ABF09290	Oligonucleotide SE
728	10	13.7	13	1	ABH06011	Oligonucleotide SE	801	10	13.7	13	1	ABF09291	Oligonucleotide SE
729	10	13.7	13	1	ABH32116	Oligonucleotide SE	802	10	13.7	13	1	ABC35308	Oligonucleotide SE
730	10	13.7	13	1	ABF82791	Oligonucleotide SE	803	10	13.7	13	1	ABF74316	Oligonucleotide SE
731	10	13.7	13	1	ABC44939	Oligonucleotide SE	804	10	13.7	13	1	ABF52555	Oligonucleotide SE
732	10	13.7	13	1	ABC20523	Oligonucleotide SE	805	10	13.7	13	1	ABH04333	Oligonucleotide SE
733	10	13.7	13	1	ABC98228	Oligonucleotide SE	806	10	13.7	13	1	ABF61636	Oligonucleotide SE
734	10	13.7	13	1	ABC26065	Oligonucleotide SE	807	10	13.7	13	1	ABC71247	Oligonucleotide SE
735	10	13.7	13	1	ABC03476	Oligonucleotide SE	808	10	13.7	13	1	ABC26064	Oligonucleotide SE
736	10	13.7	13	1	ABC54942	Oligonucleotide SE	809	10	13.7	13	1	ABC50964	Oligonucleotide SE
737	10	13.7	13	1	ABF99923	Oligonucleotide SE	810	10	13.7	13	1	ABF32039	Oligonucleotide SE
738	10	13.7	13	1	ABF25091	Oligonucleotide SE	811	10	13.7	13	1	ABF69465	Oligonucleotide SE
739	10	13.7	13	1	ABF80420	Oligonucleotide SE	812	10	13.7	13	1	ABC52263	Oligonucleotide SE
740	10	13.7	13	1	ABH06010	Oligonucleotide SE	813	10	13.7	13	1	ABC27473	Oligonucleotide SE
741	10	13.7	13	1	ABH32117	Oligonucleotide SE	814	10	13.7	13	1	ABC31700	Oligonucleotide SE
742	10	13.7	13	1	ABF61637	Oligonucleotide SE	815	10	13.7	13	1	ABF13832	Oligonucleotide SE
743	10	13.7	13	1	ABH59074	Oligonucleotide SE	816	10	13.7	13	1	ABF18108	Oligonucleotide SE
744	10	13.7	13	1	ABC98229	Oligonucleotide SE	817	10	13.7	13	1	ABH25090	Oligonucleotide SE
745	10	13.7	13	1	ABC64096	Oligonucleotide SE	818	10	13.7	13	1	ABH04673	Oligonucleotide SE
746	10	13.7	13	1	ABF25028	Oligonucleotide SE	819	10	13.7	13	1	ABH61067	Oligonucleotide SE
747	10	13.7	13	1	ABC64097	Oligonucleotide SE	820	10	13.7	13	1	ABC27472	Oligonucleotide SE
748	10	13.7	13	1	ABH18305	Oligonucleotide SE	821	10	13.7	13	1	ABC86879	Oligonucleotide SE
749	10	13.7	13	1	ABF45132	Oligonucleotide SE	822	10	13.7	13	1	ABH20195	Oligonucleotide SE
750	10	13.7	13	1	ABF99922	Oligonucleotide SE	823	10	13.7	13	1	ABH23313	Oligonucleotide SE
751	10	13.7	13	1	ABH02153	Oligonucleotide SE	824	10	13.7	13	1	ABH71246	Oligonucleotide SE
752	10	13.7	13	1	ABH04332	Oligonucleotide SE	825	10	13.7	13	1	ABF18109	Oligonucleotide SE
753	10	13.7	13	1	ABF83110	Oligonucleotide SE	826	10	13.7	13	1	ABF18585	Oligonucleotide SE
754	10	13.7	13	1	ABH47963	Oligonucleotide SE	827	10	13.7	13	1	ABF69464	Oligonucleotide SE
755	10	13.7	13	1	ABH59075	Oligonucleotide SE	828	10	13.7	13	1	ABF69932	Oligonucleotide SE
756	10	13.7	13	1	ABH59079	Oligonucleotide SE	829	10	13.7	13	1	ABF69933	Oligonucleotide SE
757	10	13.7	13	1	ABC93984	Oligonucleotide SE	830	10	13.7	13	1	ABF70153	Oligonucleotide SE
758	10	13.7	13	1	ABF93985	Oligonucleotide SE	831	10	13.7	13	1	ABH22124	Oligonucleotide SE
759	10	13.7	13	1	ABF01976	Oligonucleotide SE	832	10	13.7	13	1	ABC27055	Oligonucleotide SE
760	10	13.7	13	1	ABF94202	Oligonucleotide SE	833	10	13.7	13	1	ABF04504	Oligonucleotide SE
761	10	13.7	13	1	ABF97925	Oligonucleotide SE	834	10	13.7	13	1	ABC30230	Oligonucleotide SE
762	10	13.7	13	1	ABF80944	Oligonucleotide SE	835	10	13.7	13	1	ABC59596	Oligonucleotide SE
763	10	13.7	13	1	ABF83111	Oligonucleotide SE	836	10	13.7	13	1	ABC63811	Oligonucleotide SE

837	10	13.7	13	1	ABF18584	Oligonucleotide SE	910	9.8	13.4	13	1	ABC99317	Oligonucleotide SE
838	10	13.7	13	1	ABF32038	Oligonucleotide SE	c 911	9.8	13.4	13	1	ABC52723	Oligonucleotide SE
839	10	13.7	13	1	ABF70152	Oligonucleotide SE	c 912	9.8	13.4	13	1	ABC07406	Oligonucleotide SE
c 840	10	13.7	13	1	ABF74917	Oligonucleotide SE	913	9.8	13.4	13	1	ABC84498	Oligonucleotide SE
c 841	10	13.7	13	1	ABH04672	Oligonucleotide SE	c 914	9.8	13.4	13	1	ABC85461	Oligonucleotide SE
842	10	13.7	13	1	ABF82790	Oligonucleotide SE	915	9.8	13.4	13	1	ABF12123	Oligonucleotide SE
843	10	13.7	13	1	ABH54690	Oligonucleotide SE	c 916	9.8	13.4	13	1	ABC39732	Oligonucleotide SE
844	10	13.7	13	1	ABH61066	Oligonucleotide SE	c 917	9.8	13.4	13	1	ABF40336	Oligonucleotide SE
845	10	13.7	13	1	ABC30231	Oligonucleotide SE	918	9.8	13.4	13	1	ABF93486	Oligonucleotide SE
846	10	13.7	13	1	ABC31894	Oligonucleotide SE	c 919	9.8	13.4	13	1	ABF44207	Oligonucleotide SE
c 847	10	13.7	13	1	ABC31895	Oligonucleotide SE	920	9.8	13.4	13	1	ABF96258	Oligonucleotide SE
c 848	10	13.7	13	1	ABF94203	Oligonucleotide SE	c 921	9.8	13.4	13	1	ABF97570	Oligonucleotide SE
849	10	13.7	13	1	ABF72022	Oligonucleotide SE	922	9.8	13.4	13	1	ABF48956	Oligonucleotide SE
c 850	10	13.7	13	1	ABF72023	Oligonucleotide SE	923	9.8	13.4	13	1	ABF48957	Oligonucleotide SE
851	10	13.7	13	1	ABH23312	Oligonucleotide SE	c 924	9.8	13.4	13	1	ABH28981	Oligonucleotide SE
852	10	13.7	13	1	ABH47962	Oligonucleotide SE	925	9.8	13.4	13	1	ABF79432	Oligonucleotide SE
c 853	10	13.7	13	1	ABC20522	Oligonucleotide SE	c 926	9.8	13.4	13	1	ABH10321	Oligonucleotide SE
c 854	10	13.7	13	1	ABF01977	Oligonucleotide SE	927	9.8	13.4	13	1	ABF87621	Oligonucleotide SE
c 855	10	13.7	13	1	ABF02348	Oligonucleotide SE	c 928	9.8	13.4	13	1	ABH56042	Oligonucleotide SE
856	10	13.7	13	1	ABF09012	Oligonucleotide SE	929	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 857	10	13.7	13	1	ABF35912	Oligonucleotide SE	c 930	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 858	10	13.7	13	1	ABH18304	Oligonucleotide SE	c 931	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 859	10	13.7	13	1	ABF97924	Oligonucleotide SE	932	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
860	10	13.7	13	1	ABH03511	Oligonucleotide SE	c 933	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
861	10	13.7	14	1	AAH14798	Triple helix formi	c 934	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
862	10	13.7	14	1	AAH14810	Triple helix formi	935	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 863	10	13.7	14	1	AAH76180	Region of ALC locu	c 936	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 864	10	13.7	14	1	ADE14325	Optineurin promote	c 937	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
865	10	13.7	15	1	AAH66764	Mouse CD40 hamme	c 938	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
866	10	13.7	15	1	AAH66763	Mouse CD40 hamme	c 939	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
867	10	13.7	15	1	AAH70480	Modified oligonuc	c 940	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 868	10	13.7	15	1	AAH70480	Human CHRN2 allel	941	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
869	10	13.7	15	1	AAH70480	IGFBP3 oligonucleo	942	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 870	10	13.7	15	1	AAH70480	IGFBP3 oligonucleo	943	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 871	10	13.7	15	1	AAH70480	IGFBP3 oligonucleo	c 944	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
872	10	13.7	15	1	AAH70480	IGFBP3 oligonucleo	945	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
873	10	13.7	15	1	AAH70480	IGFBP3 oligonucleo	946	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 874	10	13.7	15	1	AAH70480	IGFBP3 oligonucleo	947	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 875	10	13.7	15	1	AAH70480	Human SCV22 gene a	948	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 876	10	13.7	15	1	AAH70480	Human GSR allele s	c 949	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 877	10	13.7	15	1	AAH70480	Human ADPR gene al	950	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 878	10	13.7	15	1	AAH70480	Human ADPR gene al	951	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 879	10	13.7	15	1	AAH70480	Bacillus thuringie	c 952	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 880	9.8	13.4	13	1	AAQ25497	Purine rich HUM11	c 953	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 881	9.8	13.4	13	1	AAQ25497	Human mitochondria	954	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
882	9.8	13.4	13	1	AAQ25497	Triple helix third	955	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
883	9.8	13.4	13	1	AAQ25497	CFTR gene analysis	c 956	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
884	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	c 957	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 885	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	c 958	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 886	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	959	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 887	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	c 960	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 888	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	961	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 889	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	962	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 890	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	963	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 891	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	c 964	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 892	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	965	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
893	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	c 966	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
894	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	c 967	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
895	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	c 968	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
896	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	c 969	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
897	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	970	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 898	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	971	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 899	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	c 972	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 900	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	973	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
901	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	974	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
902	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	c 975	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 903	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	976	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 904	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	c 977	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
905	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	978	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 906	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	979	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 907	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	c 980	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
908	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	981	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 909	9.8	13.4	13	1	AAQ25497	Oligonucleotide SE	c 982	9.8	13.4	13	1	ABH64185	Oligonucleotide SE

983	13	13.4	1	ABF65506	oligonucleotide SE	1056	9.8	13.4	13	1	ABF399998	oligonucleotide SE
984	13	13.4	1	ABH49488	oligonucleotide SE	1057	9.8	13.4	13	1	ABF93487	oligonucleotide SE
985	13	13.4	1	ABH61550	oligonucleotide SE	1058	9.8	13.4	13	1	ABH21461	oligonucleotide SE
986	13	13.4	1	ABC18721	oligonucleotide SE	c1059	9.8	13.4	13	1	ABH28587	oligonucleotide SE
987	13	13.4	1	ABC01431	oligonucleotide SE	1060	9.8	13.4	13	1	ABF81886	oligonucleotide SE
988	13	13.4	1	ABC76532	oligonucleotide SE	c1061	9.8	13.4	13	1	ABF61608	oligonucleotide SE
989	13	13.4	1	ABC02476	oligonucleotide SE	1062	9.8	13.4	13	1	ABH37736	oligonucleotide SE
990	13	13.4	1	ABC09420	oligonucleotide SE	c1063	9.8	13.4	13	1	ABH43993	oligonucleotide SE
991	13	13.4	1	ABC85813	oligonucleotide SE	1064	9.8	13.4	13	1	ABH46421	oligonucleotide SE
992	13	13.4	1	ABC63521	oligonucleotide SE	c1065	9.8	13.4	13	1	ABH58472	oligonucleotide SE
993	13	13.4	1	ABC66119	oligonucleotide SE	1066	9.8	13.4	13	1	ABC18720	oligonucleotide SE
994	13	13.4	1	ABF20843	oligonucleotide SE	1067	9.8	13.4	13	1	ABC99122	oligonucleotide SE
995	13	13.4	1	ABF35614	oligonucleotide SE	1068	9.8	13.4	13	1	ABC02478	oligonucleotide SE
996	13	13.4	1	ABF95598	oligonucleotide SE	1069	9.8	13.4	13	1	ABC80738	oligonucleotide SE
997	13	13.4	1	ABH21460	oligonucleotide SE	1070	9.8	13.4	13	1	ABC59210	oligonucleotide SE
998	13	13.4	1	ABF49804	oligonucleotide SE	c1071	9.8	13.4	13	1	ABF10012	oligonucleotide SE
999	13	13.4	1	ABF51815	oligonucleotide SE	c1072	9.8	13.4	13	1	ABC35595	oligonucleotide SE
1000	13	13.4	1	ABF52196	oligonucleotide SE	c1073	9.8	13.4	13	1	ABC63986	oligonucleotide SE
1001	13	13.4	1	ABF77449	oligonucleotide SE	1074	9.8	13.4	13	1	ABF33698	oligonucleotide SE
1002	13	13.4	1	ABF78483	oligonucleotide SE	c1075	9.8	13.4	13	1	ABF39999	oligonucleotide SE
1003	13	13.4	1	ABF82700	oligonucleotide SE	c1076	9.8	13.4	13	1	ABF97571	oligonucleotide SE
1004	13	13.4	1	ABF63798	oligonucleotide SE	1077	9.8	13.4	13	1	ABF99128	oligonucleotide SE
1005	13	13.4	1	ABF64970	oligonucleotide SE	1078	9.8	13.4	13	1	ABH00288	oligonucleotide SE
1006	13	13.4	1	ABH56043	oligonucleotide SE	1079	9.8	13.4	13	1	ABF78482	oligonucleotide SE
1007	13	13.4	1	ABF79543	oligonucleotide SE	1080	9.8	13.4	13	1	ABH07556	oligonucleotide SE
1008	13	13.4	1	ABC09421	oligonucleotide SE	1081	9.8	13.4	13	1	ABF58739	oligonucleotide SE
1009	13	13.4	1	ABC09416	oligonucleotide SE	1082	9.8	13.4	13	1	ABH34643	oligonucleotide SE
1010	13	13.4	1	ABC36697	oligonucleotide SE	1083	9.8	13.4	13	1	ABH14405	oligonucleotide SE
1011	13	13.4	1	ABC39368	oligonucleotide SE	1084	9.8	13.4	13	1	ABF04676	oligonucleotide SE
1012	13	13.4	1	ABC64466	oligonucleotide SE	1085	9.8	13.4	13	1	ABF08304	oligonucleotide SE
1013	13	13.4	1	ABC65244	oligonucleotide SE	c1086	9.8	13.4	13	1	ABC84049	oligonucleotide SE
1014	13	13.4	1	ABC66551	oligonucleotide SE	1087	9.8	13.4	13	1	ABC35594	oligonucleotide SE
1015	13	13.4	1	ABF34214	oligonucleotide SE	c1088	9.8	13.4	13	1	ABC14809	oligonucleotide SE
1016	13	13.4	1	ABF95599	oligonucleotide SE	1089	9.8	13.4	13	1	ABC40099	oligonucleotide SE
1017	13	13.4	1	ABH21401	oligonucleotide SE	c1090	9.8	13.4	13	1	ABC91401	oligonucleotide SE
1018	13	13.4	1	ABF52197	oligonucleotide SE	1091	9.8	13.4	13	1	ABC91478	oligonucleotide SE
1019	13	13.4	1	ABH29804	oligonucleotide SE	1092	9.8	13.4	13	1	ABF19925	oligonucleotide SE
1020	13	13.4	1	ABH08824	oligonucleotide SE	c1093	9.8	13.4	13	1	ABF33000	oligonucleotide SE
1021	13	13.4	1	ABH10320	oligonucleotide SE	1094	9.8	13.4	13	1	ABF34215	oligonucleotide SE
1022	13	13.4	1	ABH15749	oligonucleotide SE	1095	9.8	13.4	13	1	ABF40195	oligonucleotide SE
1023	13	13.4	1	ABH43383	oligonucleotide SE	c1096	9.8	13.4	13	1	ABF44005	oligonucleotide SE
1024	13	13.4	1	ABH43549	oligonucleotide SE	c1097	9.8	13.4	13	1	ABF99935	oligonucleotide SE
1025	13	13.4	1	ABH56040	oligonucleotide SE	1098	9.8	13.4	13	1	ABF51814	oligonucleotide SE
1026	13	13.4	1	ABC17628	oligonucleotide SE	1099	9.8	13.4	13	1	ABF78386	oligonucleotide SE
1027	13	13.4	1	ABC52233	oligonucleotide SE	1100	9.8	13.4	13	1	ABF56005	oligonucleotide SE
1028	13	13.4	1	ABC53413	oligonucleotide SE	1101	9.8	13.4	13	1	ABF57606	oligonucleotide SE
1029	13	13.4	1	ABF06602	oligonucleotide SE	c1102	9.8	13.4	13	1	ABH10419	oligonucleotide SE
1030	13	13.4	1	ABF06603	oligonucleotide SE	c1103	9.8	13.4	13	1	ABH11912	oligonucleotide SE
1031	13	13.4	1	ABC07407	oligonucleotide SE	1104	9.8	13.4	13	1	ABH37512	oligonucleotide SE
1032	13	13.4	1	ABF08305	oligonucleotide SE	1105	9.8	13.4	13	1	ABF87520	oligonucleotide SE
1033	13	13.4	1	ABC84497	oligonucleotide SE	1106	9.8	13.4	13	1	ABC17546	oligonucleotide SE
1034	13	13.4	1	ABF33699	oligonucleotide SE	c1107	9.8	13.4	13	1	ABC17547	oligonucleotide SE
1035	13	13.4	1	ABF533570	oligonucleotide SE	1108	9.8	13.4	13	1	ABC44352	oligonucleotide SE
1036	13	13.4	1	ABF79616	oligonucleotide SE	1109	9.8	13.4	13	1	ABC52232	oligonucleotide SE
1037	13	13.4	1	ABF79617	oligonucleotide SE	c1110	9.8	13.4	13	1	ABC25845	oligonucleotide SE
1038	13	13.4	1	ABF82323	oligonucleotide SE	c1111	9.8	13.4	13	1	ABF75663	oligonucleotide SE
1039	13	13.4	1	ABF32577	oligonucleotide SE	1112	9.8	13.4	13	1	ABF00945	oligonucleotide SE
1040	13	13.4	1	ABH34642	oligonucleotide SE	c1113	9.8	13.4	13	1	ABC02477	oligonucleotide SE
1041	13	13.4	1	ABH10418	oligonucleotide SE	c1114	9.8	13.4	13	1	ABC52232	oligonucleotide SE
1042	13	13.4	1	ABH11688	oligonucleotide SE	c1115	9.8	13.4	13	1	ABC07408	oligonucleotide SE
1043	13	13.4	1	ABH11689	oligonucleotide SE	c1116	9.8	13.4	13	1	ABC65245	oligonucleotide SE
1044	13	13.4	1	ABF87622	oligonucleotide SE	1117	9.8	13.4	13	1	ABC66886	oligonucleotide SE
1045	13	13.4	1	ABF91290	oligonucleotide SE	1118	9.8	13.4	13	1	ABF20842	oligonucleotide SE
1046	13	13.4	1	ABH45584	oligonucleotide SE	c1119	9.8	13.4	13	1	ABF93484	oligonucleotide SE
1047	13	13.4	1	ABH64184	oligonucleotide SE	1120	9.8	13.4	13	1	ABF93485	oligonucleotide SE
1048	13	13.4	1	ABC69698	oligonucleotide SE	1121	9.8	13.4	13	1	ABH21755	oligonucleotide SE
1049	13	13.4	1	ABC20174	oligonucleotide SE	c1122	9.8	13.4	13	1	ABH48107	oligonucleotide SE
1050	13	13.4	1	ABC25844	oligonucleotide SE	1123	9.8	13.4	13	1	ABF99934	oligonucleotide SE
1051	13	13.4	1	ABC80732	oligonucleotide SE	c1124	9.8	13.4	13	1	ABF77448	oligonucleotide SE
1052	13	13.4	1	ABC33272	oligonucleotide SE	c1125	9.8	13.4	13	1	ABH32576	oligonucleotide SE
1053	13	13.4	1	ABF14859	oligonucleotide SE	c1126	9.8	13.4	13	1	ABF57607	oligonucleotide SE
1054	13	13.4	1	ABC66550	oligonucleotide SE	c1127	9.8	13.4	13	1	ABF85491	oligonucleotide SE
1055	13	13.4	1	ABF39997	oligonucleotide SE	c1128	9.8	13.4	13	1	ABF87623	oligonucleotide SE

1129	9.8	13.4	13	1	ABF63799	Oligonucleotide SE
1130	9.8	13.4	13	1	ABF91912	Oligonucleotide SE
1131	9.8	13.4	13	1	ABF91913	Oligonucleotide SE
1132	9.8	13.4	13	1	ABH42481	Oligonucleotide SE
1133	9.8	13.4	13	1	ABH42676	Oligonucleotide SE
1134	9.8	13.4	13	1	ABH49971	Oligonucleotide SE
1135	9.8	13.4	13	1	ABC17629	Oligonucleotide SE
1136	9.8	13.4	13	1	ABF00944	Oligonucleotide SE
1137	9.8	13.4	13	1	ABC01430	Oligonucleotide SE
1138	9.8	13.4	13	1	ABC02479	Oligonucleotide SE
1139	9.8	13.4	13	1	ABC27658	Oligonucleotide SE
1140	9.8	13.4	13	1	ABC52722	Oligonucleotide SE
1141	9.8	13.4	13	1	ABC79542	Oligonucleotide SE
1142	9.8	13.4	13	1	ABC36696	Oligonucleotide SE
1143	9.8	13.4	13	1	ABC13291	Oligonucleotide SE
1144	9.8	13.4	13	1	ABC39369	Oligonucleotide SE
1145	9.8	13.4	13	1	ABC91479	Oligonucleotide SE
1146	9.8	13.4	13	1	ABF13924	Oligonucleotide SE
1147	9.8	13.4	13	1	ABF20728	Oligonucleotide SE
1148	9.8	13.4	13	1	ABF31355	Oligonucleotide SE
1149	9.8	13.4	13	1	ABF33005	Oligonucleotide SE
1150	9.8	13.4	13	1	ABF35070	Oligonucleotide SE
1151	9.8	13.4	13	1	ABF40194	Oligonucleotide SE
1152	9.8	13.4	13	1	ABF48103	Oligonucleotide SE
1153	9.8	13.4	13	1	ABH00289	Oligonucleotide SE
1154	9.8	13.4	13	1	ABF61609	Oligonucleotide SE
1155	9.8	13.4	13	1	ABH37513	Oligonucleotide SE
1156	9.8	13.4	13	1	ABF62345	Oligonucleotide SE
1157	9.8	13.4	13	1	ABF87618	Oligonucleotide SE
1158	9.8	13.4	13	1	ABF62877	Oligonucleotide SE
1159	9.8	13.4	13	1	ABH42677	Oligonucleotide SE
1160	9.8	13.4	13	1	ABH49489	Oligonucleotide SE
1161	9.8	13.4	13	1	ABH63369	Oligonucleotide SE
1162	9.8	13.4	13	1	ABC73890	Oligonucleotide SE
1163	9.8	13.4	13	1	ABC99123	Oligonucleotide SE
1164	9.8	13.4	13	1	ABC25061	Oligonucleotide SE
1165	9.8	13.4	13	1	ABC49928	Oligonucleotide SE
1166	9.8	13.4	13	1	ABC49929	Oligonucleotide SE
1167	9.8	13.4	13	1	ABC50445	Oligonucleotide SE
1168	9.8	13.4	13	1	ABC07560	Oligonucleotide SE
1169	9.8	13.4	13	1	ABC09417	Oligonucleotide SE
1170	9.8	13.4	13	1	ABC84048	Oligonucleotide SE
1171	9.8	13.4	13	1	ABC85812	Oligonucleotide SE
1172	9.8	13.4	13	1	ABC63520	Oligonucleotide SE
1173	9.8	13.4	13	1	ABC63987	Oligonucleotide SE
1174	9.8	13.4	13	1	ABC64467	Oligonucleotide SE
1175	9.8	13.4	13	1	ABC40098	Oligonucleotide SE
1176	9.8	13.4	13	1	ABF40337	Oligonucleotide SE
1177	9.8	13.4	13	1	ABF40337	Oligonucleotide SE
1178	9.8	13.4	13	1	ABF40340	Oligonucleotide SE
1179	9.8	13.4	13	1	ABF40341	Oligonucleotide SE
1180	9.8	13.4	13	1	ABF69855	Oligonucleotide SE
1181	9.8	13.4	13	1	ABF98051	Oligonucleotide SE
1182	9.8	13.4	13	1	ABF99129	Oligonucleotide SE
1183	9.8	13.4	13	1	ABH28980	Oligonucleotide SE
1184	9.8	13.4	13	1	ABF82322	Oligonucleotide SE
1185	9.8	13.4	13	1	ABF62244	Oligonucleotide SE
1186	9.8	13.4	13	1	ABH43548	Oligonucleotide SE
1187	9.8	13.4	13	1	ABC93199	Oligonucleotide SE
1188	9.8	13.4	13	1	ABC93202	Oligonucleotide SE
1189	9.8	13.4	13	1	ABC93918	Oligonucleotide SE
1190	9.8	13.4	13	1	ABC69699	Oligonucleotide SE
1191	9.8	13.4	13	1	ABC95908	Oligonucleotide SE
1192	9.8	13.4	13	1	ABF07276	Oligonucleotide SE
1193	9.8	13.4	13	1	ABC25334	Oligonucleotide SE
1194	9.8	13.4	13	1	ABF65333	Oligonucleotide SE
1195	9.8	13.4	13	1	ABF06601	Oligonucleotide SE
1196	9.8	13.4	13	1	ABC31866	Oligonucleotide SE
1197	9.8	13.4	13	1	ABC07409	Oligonucleotide SE
1198	9.8	13.4	13	1	ABC84496	Oligonucleotide SE
1199	9.8	13.4	13	1	ABC84499	Oligonucleotide SE
1200	9.8	13.4	13	1	ABC11014	Oligonucleotide SE
1201	9.8	13.4	13	1	ABC38991	Oligonucleotide SE
1202	9.8	13.4	13	1	ABC39733	Oligonucleotide SE
1203	9.8	13.4	13	1	ABF69854	Oligonucleotide SE
1204	9.8	13.4	13	1	ABF62879	Oligonucleotide SE
1205	9.8	13.4	13	1	ABF64971	Oligonucleotide SE
1206	9.8	13.4	13	1	ABH15748	Oligonucleotide SE
1207	9.8	13.4	13	1	ABF67028	Oligonucleotide SE
1208	9.8	13.4	13	1	ABF67029	Oligonucleotide SE
1209	9.8	13.4	13	1	ABH46420	Oligonucleotide SE
1210	9.8	13.4	13	1	ABH46789	Oligonucleotide SE
1211	9.8	13.4	13	1	ABC93198	Oligonucleotide SE
1212	9.8	13.4	13	1	ABC19416	Oligonucleotide SE
1213	9.8	13.4	13	1	ABC20175	Oligonucleotide SE
1214	9.8	13.4	13	1	ABC70861	Oligonucleotide SE
1215	9.8	13.4	13	1	ABC73532	Oligonucleotide SE
1216	9.8	13.4	13	1	ABC73533	Oligonucleotide SE
1217	9.8	13.4	13	1	ABC73891	Oligonucleotide SE
1218	9.8	13.4	13	1	ABF00942	Oligonucleotide SE
1219	9.8	13.4	13	1	ABF00943	Oligonucleotide SE
1220	9.8	13.4	13	1	ABC54453	Oligonucleotide SE
1221	9.8	13.4	13	1	ABC31867	Oligonucleotide SE
1222	9.8	13.4	13	1	ABC07557	Oligonucleotide SE
1223	9.8	13.4	13	1	ABC59211	Oligonucleotide SE
1224	9.8	13.4	13	1	ABC12390	Oligonucleotide SE
1225	9.8	13.4	13	1	ABF27949	Oligonucleotide SE
1226	9.8	13.4	13	1	ABF39538	Oligonucleotide SE
1227	9.8	13.4	13	1	ABF96259	Oligonucleotide SE
1228	9.8	13.4	13	1	ABH21400	Oligonucleotide SE
1229	9.8	13.4	13	1	ABH25678	Oligonucleotide SE
1230	9.8	13.4	13	1	ABF78387	Oligonucleotide SE
1231	9.8	13.4	13	1	ABF81688	Oligonucleotide SE
1232	9.8	13.4	13	1	ABF81887	Oligonucleotide SE
1233	9.8	13.4	13	1	ABF57604	Oligonucleotide SE
1234	9.8	13.4	13	1	ABH35194	Oligonucleotide SE
1235	9.8	13.4	13	1	ABF85490	Oligonucleotide SE
1236	9.8	13.4	13	1	ABF61761	Oligonucleotide SE
1237	9.8	13.4	13	1	ABF62878	Oligonucleotide SE
1238	9.8	13.4	13	1	ABF91291	Oligonucleotide SE
1239	9.8	13.4	13	1	ABH42480	Oligonucleotide SE
1240	9.8	13.4	13	1	ABH43380	Oligonucleotide SE
1241	9.8	13.4	13	1	ABH63368	Oligonucleotide SE
1242	9.8	13.4	13	1	ABC95909	Oligonucleotide SE
1243	9.8	13.4	13	1	ABC53412	Oligonucleotide SE
1244	9.8	13.4	13	1	ABF06600	Oligonucleotide SE
1245	9.8	13.4	13	1	ABC32799	Oligonucleotide SE
1246	9.8	13.4	13	1	ABC11015	Oligonucleotide SE
1247	9.8	13.4	13	1	ABC85460	Oligonucleotide SE
1248	9.8	13.4	13	1	ABC38990	Oligonucleotide SE
1249	9.8	13.4	13	1	ABF15150	Oligonucleotide SE
1250	9.8	13.4	13	1	ABF15151	Oligonucleotide SE
1251	9.8	13.4	13	1	ABF29011	Oligonucleotide SE
1252	9.8	13.4	13	1	ABF33001	Oligonucleotide SE
1253	9.8	13.4	13	1	ABF37093	Oligonucleotide SE
1254	9.8	13.4	13	1	ABH21754	Oligonucleotide SE
1255	9.8	13.4	13	1	ABF53571	Oligonucleotide SE
1256	9.8	13.4	13	1	ABH29805	Oligonucleotide SE
1257	9.8	13.4	13	1	ABH07557	Oligonucleotide SE
1258	9.8	13.4	13	1	ABH12090	Oligonucleotide SE
1259	9.8	13.4	13	1	ABH37737	Oligonucleotide SE
1260	9.8	13.4	13	1	ABF87619	Oligonucleotide SE
1261	9.8	13.4	13	1	ABF65507	Oligonucleotide SE
1262	9.8	13.4	13	1	ABH43381	Oligonucleotide SE
1263	9.8	13.4	13	1	ABH46788	Oligonucleotide SE
1264	9.8	13.4	13	1	ABH48134	Oligonucleotide SE
1265	9.8	13.4	13	1	ABH56629	Oligonucleotide SE
1266	9.8	13.4	13	1	ABH58473	Oligonucleotide SE
1267	9.8	13.4	13	1	ABH66305	Oligonucleotide SE
1268	9.8	13.4	13	1	ABZ22350	Green fluorescent
1269	9.8	13.4	13	1	ACD56505	HBV enzymatic nucl
1270	9.8	13.4	14	1	AAQ78380	Antisense oligonuc
1271	9.8	13.4	14	1	AAQ78380	HIV-1 proviral DNA
1272	9.8	13.4	14	1	AAT76230	Human IL5 receptor
1273	9.8	13.4	14	1	AAV49162	rb gene antisense
1274	9.8	13.4	14	1	AAV54026	Human IL-5 recepto





c1421	9.4	12.9	12	1	ABI40252	Oligonucleotide pr	c1494	9.4	12.9	12	1	ABI04050	Oligonucleotide pr
1422	9.4	12.9	12	1	ABH91147	Oligonucleotide pr	1495	9.4	12.9	12	1	ABI30567	Oligonucleotide pr
c1423	9.4	12.9	12	1	ABI45362	Oligonucleotide pr	1496	9.4	12.9	12	1	ABI30568	Oligonucleotide pr
c1424	9.4	12.9	12	1	ABI46192	Oligonucleotide pr	c1497	9.4	12.9	12	1	ABI38402	Oligonucleotide pr
1425	9.4	12.9	12	1	ABI48656	Oligonucleotide pr	c1498	9.4	12.9	12	1	ABI41696	Oligonucleotide pr
c1426	9.4	12.9	12	1	ABI57722	Oligonucleotide pr	c1499	9.4	12.9	12	1	ABI41699	Oligonucleotide pr
c1427	9.4	12.9	12	1	ABI73066	Oligonucleotide pr	1500	9.4	12.9	12	1	ABI45536	Oligonucleotide pr
c1428	9.4	12.9	12	1	ABI77084	Oligonucleotide pr	c1501	9.4	12.9	12	1	ABI46834	Oligonucleotide pr
c1429	9.4	12.9	12	1	ABI79825	Oligonucleotide pr	c1502	9.4	12.9	12	1	ABI47185	Oligonucleotide pr
c1430	9.4	12.9	12	1	ABI66746	Oligonucleotide pr	1503	9.4	12.9	12	1	ABI51977	Oligonucleotide pr
1431	9.4	12.9	12	1	ABH67362	Oligonucleotide pr	c1504	9.4	12.9	12	1	ABI55659	Oligonucleotide pr
c1432	9.4	12.9	12	1	ABI17924	Oligonucleotide pr	1505	9.4	12.9	12	1	ABI72657	Oligonucleotide pr
c1433	9.4	12.9	12	1	ABH68844	Oligonucleotide pr	1506	9.4	12.9	12	1	ABI62432	Oligonucleotide pr
c1434	9.4	12.9	12	1	ABI19399	Oligonucleotide pr	1507	9.4	12.9	12	1	ABI08040	Oligonucleotide pr
c1435	9.4	12.9	12	1	ABH712228	Oligonucleotide pr	c1508	9.4	12.9	12	1	ABI19281	Oligonucleotide pr
c1436	9.4	12.9	12	1	ABI22293	Oligonucleotide pr	1509	9.4	12.9	12	1	ABH69898	Oligonucleotide pr
c1437	9.4	12.9	12	1	ABH73304	Oligonucleotide pr	c1510	9.4	12.9	12	1	ABH70493	Oligonucleotide pr
1438	9.4	12.9	12	1	ABI27146	Oligonucleotide pr	c1511	9.4	12.9	12	1	ABH7942	Oligonucleotide pr
c1439	9.4	12.9	12	1	ABH77214	Oligonucleotide pr	1512	9.4	12.9	12	1	ABI25320	Oligonucleotide pr
c1440	9.4	12.9	12	1	ABI03017	Oligonucleotide pr	1513	9.4	12.9	12	1	ABH77215	Oligonucleotide pr
c1441	9.4	12.9	12	1	ABI04185	Oligonucleotide pr	1514	9.4	12.9	12	1	ABH79768	Oligonucleotide pr
c1442	9.4	12.9	12	1	ABH80463	Oligonucleotide pr	c1515	9.4	12.9	12	1	ABI08483	Oligonucleotide pr
1443	9.4	12.9	12	1	ABI37376	Oligonucleotide pr	1516	9.4	12.9	12	1	ABI08694	Oligonucleotide pr
c1444	9.4	12.9	12	1	ABH92032	Oligonucleotide pr	c1517	9.4	12.9	12	1	ABI14468	Oligonucleotide pr
1445	9.4	12.9	12	1	ABI46663	Oligonucleotide pr	1518	9.4	12.9	12	1	ABI14588	Oligonucleotide pr
c1446	9.4	12.9	12	1	ABI52878	Oligonucleotide pr	c1519	9.4	12.9	12	1	ABI41018	Oligonucleotide pr
c1447	9.4	12.9	12	1	ABI59184	Oligonucleotide pr	c1520	9.4	12.9	12	1	ABI56068	Oligonucleotide pr
c1448	9.4	12.9	12	1	ABI79909	Oligonucleotide pr	c1521	9.4	12.9	12	1	ABI61150	Oligonucleotide pr
1449	9.4	12.9	12	1	ABH70386	Oligonucleotide pr	1522	9.4	12.9	12	1	ABI62769	Oligonucleotide pr
c1450	9.4	12.9	12	1	ABH95714	Oligonucleotide pr	c1523	9.4	12.9	12	1	ABI77472	Oligonucleotide pr
1451	9.4	12.9	12	1	ABH71841	Oligonucleotide pr	1524	9.4	12.9	12	1	ABI79595	Oligonucleotide pr
c1452	9.4	12.9	12	1	ABI25318	Oligonucleotide pr	1525	9.4	12.9	12	1	ABH68022	Oligonucleotide pr
1453	9.4	12.9	12	1	ABH79108	Oligonucleotide pr	1526	9.4	12.9	12	1	ABH98228	Oligonucleotide pr
c1454	9.4	12.9	12	1	ABI04506	Oligonucleotide pr	c1527	9.4	12.9	12	1	ABI25355	Oligonucleotide pr
c1455	9.4	12.9	12	1	ABH80641	Oligonucleotide pr	c1528	9.4	12.9	12	1	ABH75498	Oligonucleotide pr
1456	9.4	12.9	12	1	ABI31092	Oligonucleotide pr	c1529	9.4	12.9	12	1	ABI01219	Oligonucleotide pr
c1457	9.4	12.9	12	1	ABI32122	Oligonucleotide pr	1530	9.4	12.9	12	1	ABH77115	Oligonucleotide pr
1458	9.4	12.9	12	1	ABH82350	Oligonucleotide pr	c1531	9.4	12.9	12	1	ABH78200	Oligonucleotide pr
c1459	9.4	12.9	12	1	ABI32640	Oligonucleotide pr	1532	9.4	12.9	12	1	ABI29336	Oligonucleotide pr
c1460	9.4	12.9	12	1	ABH88114	Oligonucleotide pr	c1533	9.4	12.9	12	1	ABI33911	Oligonucleotide pr
c1461	9.4	12.9	12	1	ABI40821	Oligonucleotide pr	c1534	9.4	12.9	12	1	ABH85108	Oligonucleotide pr
1462	9.4	12.9	12	1	ABI16326	Oligonucleotide pr	1535	9.4	12.9	12	1	ABH85958	Oligonucleotide pr
c1463	9.4	12.9	12	1	ABH91873	Oligonucleotide pr	c1536	9.4	12.9	12	1	ABI11522	Oligonucleotide pr
c1464	9.4	12.9	12	1	ABI46955	Oligonucleotide pr	c1537	9.4	12.9	12	1	ABH87880	Oligonucleotide pr
c1465	9.4	12.9	12	1	ABI47671	Oligonucleotide pr	c1538	9.4	12.9	12	1	ABH88006	Oligonucleotide pr
c1466	9.4	12.9	12	1	ABI48193	Oligonucleotide pr	1539	9.4	12.9	12	1	ABI15780	Oligonucleotide pr
c1467	9.4	12.9	12	1	ABI67900	Oligonucleotide pr	1540	9.4	12.9	12	1	ABI43563	Oligonucleotide pr
c1468	9.4	12.9	12	1	ABI70864	Oligonucleotide pr	c1541	9.4	12.9	12	1	ABI45739	Oligonucleotide pr
c1469	9.4	12.9	12	1	ABI72518	Oligonucleotide pr	1542	9.4	12.9	12	1	ABI57673	Oligonucleotide pr
1470	9.4	12.9	12	1	ABI73257	Oligonucleotide pr	c1543	9.4	12.9	12	1	ABI59468	Oligonucleotide pr
c1471	9.4	12.9	12	1	ABI60061	Oligonucleotide pr	1544	9.4	12.9	12	1	ABI73755	Oligonucleotide pr
c1472	9.4	12.9	12	1	ABI62203	Oligonucleotide pr	c1545	9.4	12.9	12	1	ABI62098	Oligonucleotide pr
c1473	9.4	12.9	12	1	ABI17646	Oligonucleotide pr	1546	9.4	12.9	12	1	ABI79599	Oligonucleotide pr
c1474	9.4	12.9	12	1	ABH68309	Oligonucleotide pr	c1547	9.4	12.9	12	1	ABH95268	Oligonucleotide pr
1475	9.4	12.9	12	1	ABI18658	Oligonucleotide pr	1548	9.4	12.9	12	1	ABH77356	Oligonucleotide pr
c1476	9.4	12.9	12	1	ABH94784	Oligonucleotide pr	c1549	9.4	12.9	12	1	ABI05646	Oligonucleotide pr
c1477	9.4	12.9	12	1	ABH75495	Oligonucleotide pr	c1550	9.4	12.9	12	1	ABI05712	Oligonucleotide pr
c1478	9.4	12.9	12	1	ABH76118	Oligonucleotide pr	1551	9.4	12.9	12	1	ABI33186	Oligonucleotide pr
c1479	9.4	12.9	12	1	ABI03618	Oligonucleotide pr	c1552	9.4	12.9	12	1	ABI09449	Oligonucleotide pr
c1480	9.4	12.9	12	1	ABI05670	Oligonucleotide pr	1553	9.4	12.9	12	1	ABH85370	Oligonucleotide pr
c1481	9.4	12.9	12	1	ABI31802	Oligonucleotide pr	c1554	9.4	12.9	12	1	ABI10492	Oligonucleotide pr
c1482	9.4	12.9	12	1	ABI32465	Oligonucleotide pr	1555	9.4	12.9	12	1	ABI11455	Oligonucleotide pr
c1483	9.4	12.9	12	1	ABH83378	Oligonucleotide pr	c1556	9.4	12.9	12	1	ABH88274	Oligonucleotide pr
1484	9.4	12.9	12	1	ABH84893	Oligonucleotide pr	1557	9.4	12.9	12	1	ABI13515	Oligonucleotide pr
1485	9.4	12.9	12	1	ABH85174	Oligonucleotide pr	1558	9.4	12.9	12	1	ABI16205	Oligonucleotide pr
1486	9.4	12.9	12	1	ABH89530	Oligonucleotide pr	c1559	9.4	12.9	12	1	ABI44606	Oligonucleotide pr
1487	9.4	12.9	12	1	ABI76716	Oligonucleotide pr	1560	9.4	12.9	12	1	ABI50901	Oligonucleotide pr
1488	9.4	12.9	12	1	ABI65404	Oligonucleotide pr	c1561	9.4	12.9	12	1	ABI52089	Oligonucleotide pr
c1489	9.4	12.9	12	1	ABI80239	Oligonucleotide pr	1562	9.4	12.9	12	1	ABI56543	Oligonucleotide pr
1490	9.4	12.9	12	1	ABI67147	Oligonucleotide pr	1563	9.4	12.9	12	1	ABI80978	Oligonucleotide pr
1491	9.4	12.9	12	1	ABH70884	Oligonucleotide pr	1564	9.4	12.9	12	1	ABI81986	Oligonucleotide pr
c1492	9.4	12.9	12	1	ABI23105	Oligonucleotide pr	1565	9.4	12.9	12	1	ABH68546	Oligonucleotide pr
1493	9.4	12.9	12	1	ABI01560	Oligonucleotide pr	c1566	9.4	12.9	12	1	ABH72306	Oligonucleotide pr

1567	9.4	12.9	12	1	ABH98632	Oligonucleotide pr	cl640	9.4	12.9	12	1	ABI33589	Oligonucleotide pr
1568	9.4	12.9	12	1	ABI29439	Oligonucleotide pr	cl641	9.4	12.9	12	1	ABI11718	Oligonucleotide pr
1569	9.4	12.9	12	1	ABI35162	Oligonucleotide pr	cl642	9.4	12.9	12	1	ABI38333	Oligonucleotide pr
1570	9.4	12.9	12	1	ABI42659	Oligonucleotide pr	cl643	9.4	12.9	12	1	ABI16856	Oligonucleotide pr
1571	9.4	12.9	12	1	ABI44936	Oligonucleotide pr	cl644	9.4	12.9	12	1	ABI48116	Oligonucleotide pr
1572	9.4	12.9	12	1	ABI53378	Oligonucleotide pr	cl645	9.4	12.9	12	1	ABI67335	Oligonucleotide pr
1573	9.4	12.9	12	1	ABI60672	Oligonucleotide pr	cl646	9.4	12.9	12	1	ABI70220	Oligonucleotide pr
1574	9.4	12.9	12	1	ABI75354	Oligonucleotide pr	cl647	9.4	12.9	12	1	ABI58755	Oligonucleotide pr
1575	9.4	12.9	12	1	ABI65524	Oligonucleotide pr	cl648	9.4	12.9	12	1	ABI75442	Oligonucleotide pr
1576	9.4	12.9	12	1	ABH92716	Oligonucleotide pr	cl649	9.4	12.9	12	1	ABI20880	Oligonucleotide pr
1577	9.4	12.9	12	1	ABH92716	Oligonucleotide pr	cl650	9.4	12.9	12	1	ABI26065	Oligonucleotide pr
1578	9.4	12.9	12	1	ABH69570	Oligonucleotide pr	cl651	9.4	12.9	12	1	ABH27338	Oligonucleotide pr
1579	9.4	12.9	12	1	ABH75419	Oligonucleotide pr	cl652	9.4	12.9	12	1	ABH80035	Oligonucleotide pr
1580	9.4	12.9	12	1	ABH7484	Oligonucleotide pr	cl653	9.4	12.9	12	1	ABI07190	Oligonucleotide pr
1581	9.4	12.9	12	1	ABI04806	Oligonucleotide pr	cl654	9.4	12.9	12	1	ABH82598	Oligonucleotide pr
1582	9.4	12.9	12	1	ABI30458	Oligonucleotide pr	cl655	9.4	12.9	12	1	ABH84297	Oligonucleotide pr
1583	9.4	12.9	12	1	ABH81369	Oligonucleotide pr	cl656	9.4	12.9	12	1	ABI68617	Oligonucleotide pr
1584	9.4	12.9	12	1	ABI07319	Oligonucleotide pr	cl657	9.4	12.9	12	1	ABI57840	Oligonucleotide pr
1585	9.4	12.9	12	1	ABI33794	Oligonucleotide pr	cl658	9.4	12.9	12	1	ABI77565	Oligonucleotide pr
1586	9.4	12.9	12	1	ABH84208	Oligonucleotide pr	cl659	9.4	12.9	12	1	ABI79088	Oligonucleotide pr
1587	9.4	12.9	12	1	ABI09480	Oligonucleotide pr	cl660	9.4	12.9	12	1	ABI20744	Oligonucleotide pr
1588	9.4	12.9	12	1	ABI37508	Oligonucleotide pr	cl661	9.4	12.9	12	1	ABH74432	Oligonucleotide pr
1589	9.4	12.9	12	1	ABH89344	Oligonucleotide pr	cl662	9.4	12.9	12	1	ABI29644	Oligonucleotide pr
1590	9.4	12.9	12	1	ABI47896	Oligonucleotide pr	cl663	9.4	12.9	12	1	ABI31489	Oligonucleotide pr
1591	9.4	12.9	12	1	ABI58941	Oligonucleotide pr	cl664	9.4	12.9	12	1	ABI08780	Oligonucleotide pr
1592	9.4	12.9	12	1	ABI74012	Oligonucleotide pr	cl665	9.4	12.9	12	1	ABH84725	Oligonucleotide pr
1593	9.4	12.9	12	1	ABI75688	Oligonucleotide pr	cl666	9.4	12.9	12	1	ABI34822	Oligonucleotide pr
1594	9.4	12.9	12	1	ABI62634	Oligonucleotide pr	cl667	9.4	12.9	12	1	ABI11594	Oligonucleotide pr
1595	9.4	12.9	12	1	ABI77570	Oligonucleotide pr	cl668	9.4	12.9	12	1	ABH12283	Oligonucleotide pr
1596	9.4	12.9	12	1	ABI64574	Oligonucleotide pr	cl669	9.4	12.9	12	1	ABH89942	Oligonucleotide pr
1597	9.4	12.9	12	1	ABI18132	Oligonucleotide pr	cl670	9.4	12.9	12	1	ABH90326	Oligonucleotide pr
1598	9.4	12.9	12	1	ABI18634	Oligonucleotide pr	cl671	9.4	12.9	12	1	ABI45021	Oligonucleotide pr
1599	9.4	12.9	12	1	ABH68690	Oligonucleotide pr	cl672	9.4	12.9	12	1	ABI48099	Oligonucleotide pr
1600	9.4	12.9	12	1	ABI18684	Oligonucleotide pr	cl673	9.4	12.9	12	1	ABI48703	Oligonucleotide pr
1601	9.4	12.9	12	1	ABI11915	Oligonucleotide pr	cl674	9.4	12.9	12	1	ABI58212	Oligonucleotide pr
1602	9.4	12.9	12	1	ABH69645	Oligonucleotide pr	cl675	9.4	12.9	12	1	ABI74928	Oligonucleotide pr
1603	9.4	12.9	12	1	ABH77233	Oligonucleotide pr	cl676	9.4	12.9	12	1	ABI61706	Oligonucleotide pr
1604	9.4	12.9	12	1	ABI33399	Oligonucleotide pr	cl677	9.4	12.9	12	1	ABH92783	Oligonucleotide pr
1605	9.4	12.9	12	1	ABH84721	Oligonucleotide pr	cl678	9.4	12.9	12	1	ABH67832	Oligonucleotide pr
1606	9.4	12.9	12	1	ABI12047	Oligonucleotide pr	cl679	9.4	12.9	12	1	ABH93422	Oligonucleotide pr
1607	9.4	12.9	12	1	ABH87714	Oligonucleotide pr	cl680	9.4	12.9	12	1	ABI121368	Oligonucleotide pr
1608	9.4	12.9	12	1	ABH87998	Oligonucleotide pr	cl681	9.4	12.9	12	1	ABH72328	Oligonucleotide pr
1609	9.4	12.9	12	1	ABI38524	Oligonucleotide pr	cl682	9.4	12.9	12	1	ABH80677	Oligonucleotide pr
1610	9.4	12.9	12	1	ABH88715	Oligonucleotide pr	cl683	9.4	12.9	12	1	ABH06346	Oligonucleotide pr
1611	9.4	12.9	12	1	ABI14005	Oligonucleotide pr	cl684	9.4	12.9	12	1	ABI06717	Oligonucleotide pr
1612	9.4	12.9	12	1	ABI42987	Oligonucleotide pr	cl685	9.4	12.9	12	1	ABI06893	Oligonucleotide pr
1613	9.4	12.9	12	1	ABI52776	Oligonucleotide pr	cl686	9.4	12.9	12	1	ABI36866	Oligonucleotide pr
1614	9.4	12.9	12	1	ABI56583	Oligonucleotide pr	cl687	9.4	12.9	12	1	ABI15225	Oligonucleotide pr
1615	9.4	12.9	12	1	ABI71653	Oligonucleotide pr	cl688	9.4	12.9	12	1	ABH91642	Oligonucleotide pr
1616	9.4	12.9	12	1	ABI72642	Oligonucleotide pr	cl689	9.4	12.9	12	1	ABI43225	Oligonucleotide pr
1617	9.4	12.9	12	1	ABI60565	Oligonucleotide pr	cl690	9.4	12.9	12	1	ABI53189	Oligonucleotide pr
1618	9.4	12.9	12	1	ABH67611	Oligonucleotide pr	cl691	9.4	12.9	12	1	ABI56672	Oligonucleotide pr
1619	9.4	12.9	12	1	ABH67642	Oligonucleotide pr	cl692	9.4	12.9	12	1	ABI59730	Oligonucleotide pr
1620	9.4	12.9	12	1	ABH68426	Oligonucleotide pr	cl693	9.4	12.9	12	1	ABI77595	Oligonucleotide pr
1621	9.4	12.9	12	1	ABH74828	Oligonucleotide pr	cl694	9.4	12.9	13	1	AAV03420	Enhanced specific
1622	9.4	12.9	12	1	ABI06718	Oligonucleotide pr	cl695	9.4	12.9	13	1	AAV03420	Enhanced specific
1623	9.4	12.9	12	1	ABI36232	Oligonucleotide pr	cl696	9.4	12.9	13	1	AAV40929	Primer AL11:417L13
1624	9.4	12.9	12	1	ABI37912	Oligonucleotide pr	cl697	9.4	12.9	13	1	AAV26795	Trichosporon aquat
1625	9.4	12.9	12	1	ABI39499	Oligonucleotide pr	cl698	9.4	12.9	13	1	AAV70056	Human INFRSFlIB ge
1626	9.4	12.9	12	1	ABH90292	Oligonucleotide pr	cl699	9.4	12.9	13	1	ABC46269	Oligonucleotide SE
1627	9.4	12.9	12	1	ABI16306	Oligonucleotide pr	cl700	9.4	12.9	13	1	ABC21592	Oligonucleotide SE
1628	9.4	12.9	12	1	ABI142572	Oligonucleotide pr	cl701	9.4	12.9	13	1	ABC23945	Oligonucleotide SE
1629	9.4	12.9	12	1	ABI44042	Oligonucleotide pr	cl702	9.4	12.9	13	1	ABC49345	Oligonucleotide SE
1630	9.4	12.9	12	1	ABI44709	Oligonucleotide pr	cl703	9.4	12.9	13	1	ABC51037	Oligonucleotide SE
1631	9.4	12.9	12	1	ABI51393	Oligonucleotide pr	cl704	9.4	12.9	13	1	ABC51407	Oligonucleotide SE
1632	9.4	12.9	12	1	ABI69673	Oligonucleotide pr	cl705	9.4	12.9	13	1	ABC02846	Oligonucleotide SE
1633	9.4	12.9	12	1	ABI17791	Oligonucleotide pr	cl706	9.4	12.9	13	1	ABC03835	Oligonucleotide SE
1634	9.4	12.9	12	1	ABH20824	Oligonucleotide pr	cl707	9.4	12.9	13	1	ABC54442	Oligonucleotide SE
1635	9.4	12.9	12	1	ABH72500	Oligonucleotide pr	cl708	9.4	12.9	13	1	ABC54910	Oligonucleotide SE
1636	9.4	12.9	12	1	ABI22516	Oligonucleotide pr	cl709	9.4	12.9	13	1	ABC05708	Oligonucleotide SE
1637	9.4	12.9	12	1	ABH76419	Oligonucleotide pr	cl710	9.4	12.9	13	1	ABC34459	Oligonucleotide SE
1638	9.4	12.9	12	1	ABI26786	Oligonucleotide pr	cl711	9.4	12.9	13	1	ABF09662	Oligonucleotide SE
1639	9.4	12.9	12	1			cl712	9.4	12.9	13	1	ABC64622	Oligonucleotide SE

1713	9.4	12.9	13	1	ABC16200	Oligonucleotide SE	1786	9.4	12.9	13	1	ABH41757	Oligonucleotide SE
c1714	9.4	12.9	13	1	ASC41057	Oligonucleotide SE	1787	9.4	12.9	13	1	ABH42159	Oligonucleotide SE
1715	9.4	12.9	13	1	ABF19575	Oligonucleotide SE	c1788	9.4	12.9	13	1	ABH45110	Oligonucleotide SE
c1716	9.4	12.9	13	1	ABF26455	Oligonucleotide SE	1789	9.4	12.9	13	1	ABH53898	Oligonucleotide SE
1717	9.4	12.9	13	1	ABF28734	Oligonucleotide SE	1790	9.4	12.9	13	1	ABH57300	Oligonucleotide SE
1718	9.4	12.9	13	1	ABF32543	Oligonucleotide SE	1791	9.4	12.9	13	1	ABH57690	Oligonucleotide SE
c1719	9.4	12.9	13	1	ABF42384	Oligonucleotide SE	c1792	9.4	12.9	13	1	ABH61584	Oligonucleotide SE
c1720	9.4	12.9	13	1	ABF73552	Oligonucleotide SE	1793	9.4	12.9	13	1	ABH45647	Oligonucleotide SE
1721	9.4	12.9	13	1	ABF43162	Oligonucleotide SE	1794	9.4	12.9	13	1	ABC49648	Oligonucleotide SE
1722	9.4	12.9	13	1	ABH25102	Oligonucleotide SE	c1795	9.4	12.9	13	1	ABC50397	Oligonucleotide SE
c1723	9.4	12.9	13	1	ABH00156	Oligonucleotide SE	c1796	9.4	12.9	13	1	ABC50401	Oligonucleotide SE
c1724	9.4	12.9	13	1	ABF75595	Oligonucleotide SE	1797	9.4	12.9	13	1	ABC76318	Oligonucleotide SE
c1725	9.4	12.9	13	1	ABH26156	Oligonucleotide SE	c1798	9.4	12.9	13	1	ABC02863	Oligonucleotide SE
1726	9.4	12.9	13	1	ABH03114	Oligonucleotide SE	1799	9.4	12.9	13	1	ABC27565	Oligonucleotide SE
c1727	9.4	12.9	13	1	ABF53196	Oligonucleotide SE	c1800	9.4	12.9	13	1	ABC52857	Oligonucleotide SE
c1728	9.4	12.9	13	1	ABH03395	Oligonucleotide SE	c1801	9.4	12.9	13	1	ABC54129	Oligonucleotide SE
c1729	9.4	12.9	13	1	ABH23651	Oligonucleotide SE	c1802	9.4	12.9	13	1	ABC54443	Oligonucleotide SE
1730	9.4	12.9	13	1	ABH06002	Oligonucleotide SE	1803	9.4	12.9	13	1	ABC31426	Oligonucleotide SE
c1731	9.4	12.9	13	1	ABF82589	Oligonucleotide SE	1804	9.4	12.9	13	1	ABC11856	Oligonucleotide SE
1732	9.4	12.9	13	1	ABH32905	Oligonucleotide SE	c1805	9.4	12.9	13	1	ABC88314	Oligonucleotide SE
c1733	9.4	12.9	13	1	ABH08559	Oligonucleotide SE	1806	9.4	12.9	13	1	ABF13770	Oligonucleotide SE
1734	9.4	12.9	13	1	ABF84804	Oligonucleotide SE	1807	9.4	12.9	13	1	ABC63663	Oligonucleotide SE
c1735	9.4	12.9	13	1	ABF84805	Oligonucleotide SE	1808	9.4	12.9	13	1	ABC39010	Oligonucleotide SE
1736	9.4	12.9	13	1	ABH13466	Oligonucleotide SE	c1809	9.4	12.9	13	1	ABC64528	Oligonucleotide SE
c1737	9.4	12.9	13	1	ABF63725	Oligonucleotide SE	1810	9.4	12.9	13	1	ABC64529	Oligonucleotide SE
1738	9.4	12.9	13	1	ABH14806	Oligonucleotide SE	1811	9.4	12.9	13	1	ABC39899	Oligonucleotide SE
1739	9.4	12.9	13	1	ABH41252	Oligonucleotide SE	c1812	9.4	12.9	13	1	ABC16199	Oligonucleotide SE
1740	9.4	12.9	13	1	ABH53760	Oligonucleotide SE	1813	9.4	12.9	13	1	ABF15750	Oligonucleotide SE
c1741	9.4	12.9	13	1	ABH59823	Oligonucleotide SE	c1814	9.4	12.9	13	1	ABF22104	Oligonucleotide SE
1742	9.4	12.9	13	1	ABH59590	Oligonucleotide SE	1815	9.4	12.9	13	1	ABF23068	Oligonucleotide SE
c1743	9.4	12.9	13	1	ABH59591	Oligonucleotide SE	c1816	9.4	12.9	13	1	ABF28323	Oligonucleotide SE
1744	9.4	12.9	13	1	ABH62571	Oligonucleotide SE	c1817	9.4	12.9	13	1	ABF43155	Oligonucleotide SE
c1745	9.4	12.9	13	1	ABC68001	Oligonucleotide SE	1818	9.4	12.9	13	1	ABF44657	Oligonucleotide SE
1746	9.4	12.9	13	1	ABC93472	Oligonucleotide SE	c1819	9.4	12.9	13	1	ABH21912	Oligonucleotide SE
c1747	9.4	12.9	13	1	ABC94697	Oligonucleotide SE	c1820	9.4	12.9	13	1	ABF71905	Oligonucleotide SE
c1748	9.4	12.9	13	1	ABF15595	Oligonucleotide SE	1821	9.4	12.9	13	1	ABH25152	Oligonucleotide SE
c1749	9.4	12.9	13	1	ABC21785	Oligonucleotide SE	c1822	9.4	12.9	13	1	ABH05017	Oligonucleotide SE
c1750	9.4	12.9	13	1	ABC98917	Oligonucleotide SE	1823	9.4	12.9	13	1	ABF80830	Oligonucleotide SE
1751	9.4	12.9	13	1	ASC24679	Oligonucleotide SE	c1824	9.4	12.9	13	1	ABH32904	Oligonucleotide SE
c1752	9.4	12.9	13	1	ABC50399	Oligonucleotide SE	1825	9.4	12.9	13	1	ABH08287	Oligonucleotide SE
1753	9.4	12.9	13	1	ABC28260	Oligonucleotide SE	1826	9.4	12.9	13	1	ABF85804	Oligonucleotide SE
1754	9.4	12.9	13	1	ABC28610	Oligonucleotide SE	1827	9.4	12.9	13	1	ABH37214	Oligonucleotide SE
c1755	9.4	12.9	13	1	ABC31427	Oligonucleotide SE	c1828	9.4	12.9	13	1	ABH14807	Oligonucleotide SE
1756	9.4	12.9	13	1	ABC81439	Oligonucleotide SE	c1829	9.4	12.9	13	1	ABF64993	Oligonucleotide SE
c1757	9.4	12.9	13	1	ABC08266	Oligonucleotide SE	1830	9.4	12.9	13	1	ABH41554	Oligonucleotide SE
1758	9.4	12.9	13	1	ABF09126	Oligonucleotide SE	1831	9.4	12.9	13	1	ABH17224	Oligonucleotide SE
1759	9.4	12.9	13	1	ABF09663	Oligonucleotide SE	1832	9.4	12.9	13	1	ABH43934	Oligonucleotide SE
c1760	9.4	12.9	13	1	ABC61966	Oligonucleotide SE	1833	9.4	12.9	13	1	ABH45774	Oligonucleotide SE
1761	9.4	12.9	13	1	ABF12306	Oligonucleotide SE	1834	9.4	12.9	13	1	ABH49252	Oligonucleotide SE
c1762	9.4	12.9	13	1	ABC39011	Oligonucleotide SE	1835	9.4	12.9	13	1	ABH54962	Oligonucleotide SE
c1763	9.4	12.9	13	1	ABC39900	Oligonucleotide SE	1836	9.4	12.9	13	1	ABH60408	Oligonucleotide SE
c1764	9.4	12.9	13	1	ABC65327	Oligonucleotide SE	1837	9.4	12.9	13	1	ABH64193	Oligonucleotide SE
1765	9.4	12.9	13	1	ABC41694	Oligonucleotide SE	c1838	9.4	12.9	13	1	ASC42384	Oligonucleotide SE
1766	9.4	12.9	13	1	ABF22105	Oligonucleotide SE	c1839	9.4	12.9	13	1	ABC92839	Oligonucleotide SE
1767	9.4	12.9	13	1	ABF25460	Oligonucleotide SE	c1840	9.4	12.9	13	1	ABC95529	Oligonucleotide SE
1768	9.4	12.9	13	1	ABF27232	Oligonucleotide SE	1841	9.4	12.9	13	1	ABC21593	Oligonucleotide SE
c1769	9.4	12.9	13	1	ABF37359	Oligonucleotide SE	1842	9.4	12.9	13	1	ABC21784	Oligonucleotide SE
c1770	9.4	12.9	13	1	ABF67682	Oligonucleotide SE	1843	9.4	12.9	13	1	ABC97184	Oligonucleotide SE
c1771	9.4	12.9	13	1	ABH19413	Oligonucleotide SE	1844	9.4	12.9	13	1	ABC76273	Oligonucleotide SE
1772	9.4	12.9	13	1	ABH21913	Oligonucleotide SE	c1845	9.4	12.9	13	1	ABC76827	Oligonucleotide SE
1773	9.4	12.9	13	1	ABF47485	Oligonucleotide SE	1846	9.4	12.9	13	1	ABC27330	Oligonucleotide SE
1774	9.4	12.9	13	1	ABH24254	Oligonucleotide SE	1847	9.4	12.9	13	1	ABC52784	Oligonucleotide SE
c1775	9.4	12.9	13	1	ABH26487	Oligonucleotide SE	c1848	9.4	12.9	13	1	ABC78033	Oligonucleotide SE
1776	9.4	12.9	13	1	ABH04046	Oligonucleotide SE	1849	9.4	12.9	13	1	ABC28608	Oligonucleotide SE
1777	9.4	12.9	13	1	ABF54250	Oligonucleotide SE	1850	9.4	12.9	13	1	ABF03754	Oligonucleotide SE
1778	9.4	12.9	13	1	ABH32809	Oligonucleotide SE	c1851	9.4	12.9	13	1	ABC04591	Oligonucleotide SE
1779	9.4	12.9	13	1	ABF58092	Oligonucleotide SE	c1852	9.4	12.9	13	1	ABC54044	Oligonucleotide SE
1780	9.4	12.9	13	1	ABH08558	Oligonucleotide SE	c1853	9.4	12.9	13	1	ABC05642	Oligonucleotide SE
c1781	9.4	12.9	13	1	ABF84335	Oligonucleotide SE	c1854	9.4	12.9	13	1	ABCS5217	Oligonucleotide SE
1782	9.4	12.9	13	1	ABF84808	Oligonucleotide SE	c1855	9.4	12.9	13	1	ABC30463	Oligonucleotide SE
c1783	9.4	12.9	13	1	ABH36075	Oligonucleotide SE	1856	9.4	12.9	13	1	ABF06322	Oligonucleotide SE
1784	9.4	12.9	13	1	ABH37083	Oligonucleotide SE	1857	9.4	12.9	13	1	ABC57984	Oligonucleotide SE
1785	9.4	12.9	13	1	ABH12346	Oligonucleotide SE	1858	9.4	12.9	13	1	ABC08883	Oligonucleotide SE

1859	9.4	12.9	13	1	ABC58136	Oligonucleotide SE	CI932	9.4	12.9	13	1	ABF49163	Oligonucleotide SE
1860	9.4	12.9	13	1	ABC84254	Oligonucleotide SE	1933	9.4	12.9	13	1	ABF99391	Oligonucleotide SE
1861	9.4	12.9	13	1	ABC84255	Oligonucleotide SE	CI934	9.4	12.9	13	1	ABH27290	Oligonucleotide SE
1862	9.4	12.9	13	1	ABCL1210	Oligonucleotide SE	1935	9.4	12.9	13	1	ABH27293	Oligonucleotide SE
1863	9.4	12.9	13	1	ABC88231	Oligonucleotide SE	CI936	9.4	12.9	13	1	ABH04047	Oligonucleotide SE
1864	9.4	12.9	13	1	ABC39266	Oligonucleotide SE	1937	9.4	12.9	13	1	ABH04878	Oligonucleotide SE
1865	9.4	12.9	13	1	ABC15528	Oligonucleotide SE	1938	9.4	12.9	13	1	ABH08285	Oligonucleotide SE
1866	9.4	12.9	13	1	ABC19901	Oligonucleotide SE	1939	9.4	12.9	13	1	ABH08918	Oligonucleotide SE
1867	9.4	12.9	13	1	ABC40250	Oligonucleotide SE	1940	9.4	12.9	13	1	ABH09269	Oligonucleotide SE
1868	9.4	12.9	13	1	ABF19666	Oligonucleotide SE	1941	9.4	12.9	13	1	ABH09784	Oligonucleotide SE
1869	9.4	12.9	13	1	ABF24055	Oligonucleotide SE	CI942	9.4	12.9	13	1	ABH37082	Oligonucleotide SE
1870	9.4	12.9	13	1	ABF31384	Oligonucleotide SE	1943	9.4	12.9	13	1	ABF62508	Oligonucleotide SE
1871	9.4	12.9	13	1	ABF33393	Oligonucleotide SE	CI944	9.4	12.9	13	1	ABH38409	Oligonucleotide SE
1872	9.4	12.9	13	1	ABF35481	Oligonucleotide SE	CI945	9.4	12.9	13	1	ABH39906	Oligonucleotide SE
1873	9.4	12.9	13	1	ABF35871	Oligonucleotide SE	CI946	9.4	12.9	13	1	ABH16021	Oligonucleotide SE
1874	9.4	12.9	13	1	ABH18330	Oligonucleotide SE	1947	9.4	12.9	13	1	ABH41301	Oligonucleotide SE
1875	9.4	12.9	13	1	ABH19171	Oligonucleotide SE	1948	9.4	12.9	13	1	ABH48736	Oligonucleotide SE
1876	9.4	12.9	13	1	ABF70122	Oligonucleotide SE	CI949	9.4	12.9	13	1	ABH48737	Oligonucleotide SE
1877	9.4	12.9	13	1	ABF70123	Oligonucleotide SE	1950	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1878	9.4	12.9	13	1	ABF71267	Oligonucleotide SE	CI951	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1879	9.4	12.9	13	1	ABF47484	Oligonucleotide SE	1952	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1880	9.4	12.9	13	1	ABH00157	Oligonucleotide SE	CI953	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1881	9.4	12.9	13	1	ABF75624	Oligonucleotide SE	1954	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1882	9.4	12.9	13	1	ABH27291	Oligonucleotide SE	CI955	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1883	9.4	12.9	13	1	ABH03394	Oligonucleotide SE	1956	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1884	9.4	12.9	13	1	ABF54251	Oligonucleotide SE	CI957	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1885	9.4	12.9	13	1	ABH04879	Oligonucleotide SE	1958	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1886	9.4	12.9	13	1	ABH32349	Oligonucleotide SE	CI959	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1887	9.4	12.9	13	1	ABH35003	Oligonucleotide SE	1960	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1888	9.4	12.9	13	1	ABF85805	Oligonucleotide SE	1961	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1889	9.4	12.9	13	1	ABH36111	Oligonucleotide SE	CI962	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1890	9.4	12.9	13	1	ABF60977	Oligonucleotide SE	1963	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1891	9.4	12.9	13	1	ABF61732	Oligonucleotide SE	CI964	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1892	9.4	12.9	13	1	ABH12114	Oligonucleotide SE	1965	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1893	9.4	12.9	13	1	ABH12344	Oligonucleotide SE	CI966	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1894	9.4	12.9	13	1	ABF65193	Oligonucleotide SE	1967	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1895	9.4	12.9	13	1	ABF91550	Oligonucleotide SE	CI968	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1896	9.4	12.9	13	1	ABH44397	Oligonucleotide SE	1969	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1897	9.4	12.9	13	1	ABH51303	Oligonucleotide SE	CI970	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1898	9.4	12.9	13	1	ABH53761	Oligonucleotide SE	1971	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1899	9.4	12.9	13	1	ABH56303	Oligonucleotide SE	CI972	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1900	9.4	12.9	13	1	ABH56778	Oligonucleotide SE	1973	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1901	9.4	12.9	13	1	ABH58032	Oligonucleotide SE	1974	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1902	9.4	12.9	13	1	ABH58033	Oligonucleotide SE	CI975	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1903	9.4	12.9	13	1	ABC42385	Oligonucleotide SE	1976	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1904	9.4	12.9	13	1	ABC93031	Oligonucleotide SE	1977	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1905	9.4	12.9	13	1	ABC68200	Oligonucleotide SE	1978	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1906	9.4	12.9	13	1	ABC49342	Oligonucleotide SE	1979	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1907	9.4	12.9	13	1	ABC49344	Oligonucleotide SE	1980	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1908	9.4	12.9	13	1	ABC52785	Oligonucleotide SE	CI981	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1909	9.4	12.9	13	1	ABC52785	Oligonucleotide SE	1982	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1910	9.4	12.9	13	1	ABC28261	Oligonucleotide SE	1983	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1911	9.4	12.9	13	1	ABC54045	Oligonucleotide SE	CI984	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1912	9.4	12.9	13	1	ABC54363	Oligonucleotide SE	1985	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1913	9.4	12.9	13	1	ABC31037	Oligonucleotide SE	CI986	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1914	9.4	12.9	13	1	ABF06503	Oligonucleotide SE	1987	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1915	9.4	12.9	13	1	ABC32308	Oligonucleotide SE	CI988	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1916	9.4	12.9	13	1	ABC83376	Oligonucleotide SE	1989	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1917	9.4	12.9	13	1	ABC83377	Oligonucleotide SE	CI990	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1918	9.4	12.9	13	1	ABC85827	Oligonucleotide SE	1991	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1919	9.4	12.9	13	1	ABC61967	Oligonucleotide SE	CI992	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1920	9.4	12.9	13	1	ABC37801	Oligonucleotide SE	1993	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1921	9.4	12.9	13	1	ABC62945	Oligonucleotide SE	CI994	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1922	9.4	12.9	13	1	ABF13697	Oligonucleotide SE	1995	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1923	9.4	12.9	13	1	ABF15495	Oligonucleotide SE	CI996	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1924	9.4	12.9	13	1	ABF23310	Oligonucleotide SE	1997	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1925	9.4	12.9	13	1	ABF24054	Oligonucleotide SE	CI998	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1926	9.4	12.9	13	1	ABF37358	Oligonucleotide SE	1999	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1927	9.4	12.9	13	1	ABH18331	Oligonucleotide SE	C2000	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1928	9.4	12.9	13	1	ABH19170	Oligonucleotide SE	C2001	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1929	9.4	12.9	13	1	ABF94183	Oligonucleotide SE	C2002	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1930	9.4	12.9	13	1	ABF44660	Oligonucleotide SE	C2003	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1931	9.4	12.9	13	1	ABF73295	Oligonucleotide SE	C2004	9.4	12.9	13	1	ABH62570	Oligonucleotide SE

c2005	9.4	12.9	13	1	ABC42529	Oligonucleotide SE
c2006	9.4	12.9	13	1	ABC68634	Oligonucleotide SE
c2007	9.4	12.9	13	1	ABC22407	Oligonucleotide SE
c2008	9.4	12.9	13	1	ABC24678	Oligonucleotide SE
c2009	9.4	12.9	13	1	ABC49649	Oligonucleotide SE
c2010	9.4	12.9	13	1	ABF01571	Oligonucleotide SE
c2011	9.4	12.9	13	1	ABC54212	Oligonucleotide SE
c2012	9.4	12.9	13	1	ABC05643	Oligonucleotide SE
c2013	9.4	12.9	13	1	ABF05394	Oligonucleotide SE
c2014	9.4	12.9	13	1	ABF09665	Oligonucleotide SE
c2015	9.4	12.9	13	1	ABC10378	Oligonucleotide SE
c2016	9.4	12.9	13	1	ABC86604	Oligonucleotide SE
c2017	9.4	12.9	13	1	ABC12758	Oligonucleotide SE
c2018	9.4	12.9	13	1	ABC63662	Oligonucleotide SE
c2019	9.4	12.9	13	1	ABC39012	Oligonucleotide SE
c2020	9.4	12.9	13	1	ABC63715	Oligonucleotide SE
c2021	9.4	12.9	13	1	ABC41695	Oligonucleotide SE
c2022	9.4	12.9	13	1	ABC42115	Oligonucleotide SE
c2023	9.4	12.9	13	1	ABF17079	Oligonucleotide SE
c2024	9.4	12.9	13	1	ABF33392	Oligonucleotide SE
c2025	9.4	12.9	13	1	ABF36955	Oligonucleotide SE
c2026	9.4	12.9	13	1	ABF67683	Oligonucleotide SE
c2027	9.4	12.9	13	1	ABF43101	Oligonucleotide SE
c2028	9.4	12.9	13	1	ABF93304	Oligonucleotide SE
c2029	9.4	12.9	13	1	ABF69697	Oligonucleotide SE
c2030	9.4	12.9	13	1	ABF95993	Oligonucleotide SE
c2031	9.4	12.9	13	1	ABH24255	Oligonucleotide SE
c2032	9.4	12.9	13	1	ABH00851	Oligonucleotide SE
c2033	9.4	12.9	13	1	ABH26960	Oligonucleotide SE
c2034	9.4	12.9	13	1	ABF77162	Oligonucleotide SE
c2035	9.4	12.9	13	1	ABH27350	Oligonucleotide SE
c2036	9.4	12.9	13	1	ABH02335	Oligonucleotide SE
c2037	9.4	12.9	13	1	ABH27852	Oligonucleotide SE
c2038	9.4	12.9	13	1	ABF53194	Oligonucleotide SE
c2039	9.4	12.9	13	1	ABF53195	Oligonucleotide SE
c2040	9.4	12.9	13	1	ABH05319	Oligonucleotide SE
c2041	9.4	12.9	13	1	ABH05319	Oligonucleotide SE
c2042	9.4	12.9	13	1	ABH08286	Oligonucleotide SE
c2043	9.4	12.9	13	1	ABF84809	Oligonucleotide SE
c2044	9.4	12.9	13	1	ABF86652	Oligonucleotide SE
c2045	9.4	12.9	13	1	ABH12115	Oligonucleotide SE
c2046	9.4	12.9	13	1	ABF62511	Oligonucleotide SE
c2047	9.4	12.9	13	1	ABH39554	Oligonucleotide SE
c2048	9.4	12.9	13	1	ABF65320	Oligonucleotide SE
c2049	9.4	12.9	13	1	ABH16168	Oligonucleotide SE
c2050	9.4	12.9	13	1	ABH16169	Oligonucleotide SE
c2051	9.4	12.9	13	1	ABF91690	Oligonucleotide SE
c2052	9.4	12.9	13	1	ABH48620	Oligonucleotide SE
c2053	9.4	12.9	13	1	ABH48621	Oligonucleotide SE
c2054	9.4	12.9	13	1	ABH53443	Oligonucleotide SE
c2055	9.4	12.9	13	1	ABH63301	Oligonucleotide SE
c2056	9.4	12.9	13	1	ABH64250	Oligonucleotide SE
c2057	9.4	12.9	13	1	ABC92840	Oligonucleotide SE
c2058	9.4	12.9	13	1	ABC19744	Oligonucleotide SE
c2059	9.4	12.9	13	1	ABC19745	Oligonucleotide SE
c2060	9.4	12.9	13	1	ABC46268	Oligonucleotide SE
c2061	9.4	12.9	13	1	ABC97849	Oligonucleotide SE
c2062	9.4	12.9	13	1	ABC97868	Oligonucleotide SE
c2063	9.4	12.9	13	1	ABC23952	Oligonucleotide SE
c2064	9.4	12.9	13	1	ABC23953	Oligonucleotide SE
c2065	9.4	12.9	13	1	ABC50396	Oligonucleotide SE
c2066	9.4	12.9	13	1	ABC01572	Oligonucleotide SE
c2067	9.4	12.9	13	1	ABC01573	Oligonucleotide SE
c2068	9.4	12.9	13	1	ABF01570	Oligonucleotide SE
c2069	9.4	12.9	13	1	ABC02900	Oligonucleotide SE
c2070	9.4	12.9	13	1	ABC54128	Oligonucleotide SE
c2071	9.4	12.9	13	1	ABF04552	Oligonucleotide SE
c2072	9.4	12.9	13	1	ABF05163	Oligonucleotide SE
c2073	9.4	12.9	13	1	ABC81754	Oligonucleotide SE
c2074	9.4	12.9	13	1	ABF09992	Oligonucleotide SE
c2075	9.4	12.9	13	1	ABF09993	Oligonucleotide SE
c2076	9.4	12.9	13	1	ABC12223	Oligonucleotide SE
c2077	9.4	12.9	13	1	ABC66605	Oligonucleotide SE
c2078	9.4	12.9	13	1	ABC62350	Oligonucleotide SE
c2079	9.4	12.9	13	1	ABC62944	Oligonucleotide SE
c2080	9.4	12.9	13	1	ABC88230	Oligonucleotide SE
c2081	9.4	12.9	13	1	ABC39898	Oligonucleotide SE
c2082	9.4	12.9	13	1	ABF24038	Oligonucleotide SE
c2083	9.4	12.9	13	1	ABF34394	Oligonucleotide SE
c2084	9.4	12.9	13	1	ABF43100	Oligonucleotide SE
c2085	9.4	12.9	13	1	ABF93667	Oligonucleotide SE
c2086	9.4	12.9	13	1	ABF69696	Oligonucleotide SE
c2087	9.4	12.9	13	1	ABF97821	Oligonucleotide SE
c2088	9.4	12.9	13	1	ABF98719	Oligonucleotide SE
c2089	9.4	12.9	13	1	ABF99133	Oligonucleotide SE
c2090	9.4	12.9	13	1	ABF49158	Oligonucleotide SE
c2091	9.4	12.9	13	1	ABF43159	Oligonucleotide SE
c2092	9.4	12.9	13	1	ABH02911	Oligonucleotide SE
c2093	9.4	12.9	13	1	ABH03167	Oligonucleotide SE
c2094	9.4	12.9	13	1	ABH29650	Oligonucleotide SE
c2095	9.4	12.9	13	1	ABF80121	Oligonucleotide SE
c2096	9.4	12.9	13	1	ABH05318	Oligonucleotide SE
c2097	9.4	12.9	13	1	ABF84334	Oligonucleotide SE
c2098	9.4	12.9	13	1	ABF86653	Oligonucleotide SE
c2099	9.4	12.9	13	1	ABH38408	Oligonucleotide SE
c2100	9.4	12.9	13	1	ABH13480	Oligonucleotide SE
c2101	9.4	12.9	13	1	ABH48201	Oligonucleotide SE
c2102	9.4	12.9	13	1	ABH49253	Oligonucleotide SE
c2103	9.4	12.9	13	1	ABH49876	Oligonucleotide SE
c2104	9.4	12.9	13	1	ABH49877	Oligonucleotide SE
c2105	9.4	12.9	13	1	ABH56779	Oligonucleotide SE
c2106	9.4	12.9	13	1	ABC96214	Oligonucleotide SE
c2107	9.4	12.9	13	1	ABC21548	Oligonucleotide SE
c2108	9.4	12.9	13	1	ABC75195	Oligonucleotide SE
c2109	9.4	12.9	13	1	ABC76824	Oligonucleotide SE
c2110	9.4	12.9	13	1	ABC02656	Oligonucleotide SE
c2111	9.4	12.9	13	1	ABC02657	Oligonucleotide SE
c2112	9.4	12.9	13	1	ABC52856	Oligonucleotide SE
c2113	9.4	12.9	13	1	ABF03498	Oligonucleotide SE
c2114	9.4	12.9	13	1	ABF03834	Oligonucleotide SE
c2115	9.4	12.9	13	1	ABF08289	Oligonucleotide SE
c2116	9.4	12.9	13	1	ABF09127	Oligonucleotide SE
c2117	9.4	12.9	13	1	ABF11072	Oligonucleotide SE
c2118	9.4	12.9	13	1	ABC16198	Oligonucleotide SE
c2119	9.4	12.9	13	1	ABC65326	Oligonucleotide SE
c2120	9.4	12.9	13	1	ABF19667	Oligonucleotide SE
c2121	9.4	12.9	13	1	ABF22976	Oligonucleotide SE
c2122	9.4	12.9	13	1	ABF23069	Oligonucleotide SE
c2123	9.4	12.9	13	1	ABF25014	Oligonucleotide SE
c2124	9.4	12.9	13	1	ABF27233	Oligonucleotide SE
c2125	9.4	12.9	13	1	ABF34395	Oligonucleotide SE
c2126	9.4	12.9	13	1	ABF36953	Oligonucleotide SE
c2127	9.4	12.9	13	1	ABF72081	Oligonucleotide SE
c2128	9.4	12.9	13	1	ABF72081	Oligonucleotide SE
c2129	9.4	12.9	13	1	ABF97141	Oligonucleotide SE
c2130	9.4	12.9	13	1	ABF73553	Oligonucleotide SE
c2131	9.4	12.9	13	1	ABH01943	Oligonucleotide SE
c2132	9.4	12.9	13	1	ABH01944	Oligonucleotide SE
c2133	9.4	12.9	13	1	ABF77492	Oligonucleotide SE
c2134	9.4	12.9	13	1	ABH28110	Oligonucleotide SE
c2135	9.4	12.9	13	1	ABH03166	Oligonucleotide SE
c2136	9.4	12.9	13	1	ABF79263	Oligonucleotide SE
c2137	9.4	12.9	13	1	ABH06003	Oligonucleotide SE
c2138	9.4	12.9	13	1	ABF82588	Oligonucleotide SE
c2139	9.4	12.9	13	1	ABH32808	Oligonucleotide SE
c2140	9.4	12.9	13	1	ABF58981	Oligonucleotide SE
c2141	9.4	12.9	13	1	ABF63910	Oligonucleotide SE
c2142	9.4	12.9	13	1	ABH41303	Oligonucleotide SE
c2143	9.4	12.9	13	1	ABH42158	Oligonucleotide SE
c2144	9.4	12.9	13	1	ABH17255	Oligonucleotide SE
c2145	9.4	12.9	13	1	ABH53442	Oligonucleotide SE
c2146	9.4	12.9	13	1	ABH57691	Oligonucleotide SE
c2147	9.4	12.9	13	1	ABC93473	Oligonucleotide SE
c2148	9.4	12.9	13	1	ABC95532	Oligonucleotide SE
c2149	9.4	12.9	13	1	ABC97185	Oligonucleotide SE
c2150	9.4	12.9	13	1	ABC48828	Oligonucleotide SE

2151	9.4	12.9	13	1	ABCO2862	Oligonucleotide SE	2224	9.4	12.9	13	1	ABF73294	Oligonucleotide SE
2152	9.4	12.9	13	1	ABC27564	Oligonucleotide SE	2225	9.4	12.9	13	1	ABF49518	Oligonucleotide SE
2153	9.4	12.9	13	1	ABC28611	Oligonucleotide SE	2226	9.4	12.9	13	1	ABF49519	Oligonucleotide SE
2154	9.4	12.9	13	1	ABC29148	Oligonucleotide SE	2227	9.4	12.9	13	1	ABH25153	Oligonucleotide SE
2155	9.4	12.9	13	1	ABC79370	Oligonucleotide SE	2228	9.4	12.9	13	1	ABH00850	Oligonucleotide SE
2156	9.4	12.9	13	1	ABC54364	Oligonucleotide SE	2229	9.4	12.9	13	1	ABF78025	Oligonucleotide SE
2157	9.4	12.9	13	1	ABC54911	Oligonucleotide SE	2230	9.4	12.9	13	1	ABF80153	Oligonucleotide SE
2158	9.4	12.9	13	1	ABF05162	Oligonucleotide SE	2231	9.4	12.9	13	1	ABH05542	Oligonucleotide SE
2159	9.4	12.9	13	1	ABF83283	Oligonucleotide SE	2232	9.4	12.9	13	1	ABH05543	Oligonucleotide SE
2160	9.4	12.9	13	1	ABF09664	Oligonucleotide SE	2233	9.4	12.9	13	1	ABH08031	Oligonucleotide SE
2161	9.4	12.9	13	1	ABH11859	Oligonucleotide SE	2234	9.4	12.9	13	1	ABF81513	Oligonucleotide SE
2162	9.4	12.9	13	1	ABF62351	Oligonucleotide SE	2235	9.4	12.9	13	1	ABH08284	Oligonucleotide SE
2163	9.4	12.9	13	1	ABF13771	Oligonucleotide SE	2236	9.4	12.9	13	1	ABH08919	Oligonucleotide SE
2164	9.4	12.9	13	1	ABF90606	Oligonucleotide SE	2237	9.4	12.9	13	1	ABH10811	Oligonucleotide SE
2165	9.4	12.9	13	1	ABF17078	Oligonucleotide SE	2238	9.4	12.9	13	1	ABH11417	Oligonucleotide SE
2166	9.4	12.9	13	1	ABF19570	Oligonucleotide SE	2239	9.4	12.9	13	1	ABF62509	Oligonucleotide SE
2167	9.4	12.9	13	1	ABF20583	Oligonucleotide SE	2240	9.4	12.9	13	1	ABH39907	Oligonucleotide SE
2168	9.4	12.9	13	1	ABF25015	Oligonucleotide SE	2241	9.4	12.9	13	1	ABH17044	Oligonucleotide SE
2169	9.4	12.9	13	1	ABF36398	Oligonucleotide SE	2242	9.4	12.9	13	1	ABH51807	Oligonucleotide SE
2170	9.4	12.9	13	1	ABF36954	Oligonucleotide SE	2243	9.4	12.9	13	1	ABH53897	Oligonucleotide SE
2171	9.4	12.9	13	1	ABF39204	Oligonucleotide SE	2244	9.4	12.9	13	1	ABH54963	Oligonucleotide SE
2172	9.4	12.9	13	1	ABF43154	Oligonucleotide SE	2245	9.4	12.9	13	1	ABH56216	Oligonucleotide SE
2173	9.4	12.9	13	1	ABH18958	Oligonucleotide SE	2246	9.4	12.9	13	1	ABH56217	Oligonucleotide SE
2174	9.4	12.9	13	1	ABF69350	Oligonucleotide SE	2247	9.4	12.9	13	1	ABC93030	Oligonucleotide SE
2175	9.4	12.9	13	1	ABF71266	Oligonucleotide SE	2248	9.4	12.9	13	1	ABC94165	Oligonucleotide SE
2176	9.4	12.9	13	1	ABH23858	Oligonucleotide SE	2249	9.4	12.9	13	1	ABG94166	Oligonucleotide SE
2177	9.4	12.9	13	1	ABF99132	Oligonucleotide SE	2250	9.4	12.9	13	1	ABG94696	Oligonucleotide SE
2178	9.4	12.9	13	1	ABF75594	Oligonucleotide SE	2251	9.4	12.9	13	1	ABC21177	Oligonucleotide SE
2179	9.4	12.9	13	1	ABH01942	Oligonucleotide SE	2252	9.4	12.9	13	1	ABC71594	Oligonucleotide SE
2180	9.4	12.9	13	1	ABH02044	Oligonucleotide SE	2253	9.4	12.9	13	1	ABC71614	Oligonucleotide SE
2181	9.4	12.9	13	1	ABF79262	Oligonucleotide SE	2254	9.4	12.9	13	1	ABC23944	Oligonucleotide SE
2182	9.4	12.9	13	1	ABF54515	Oligonucleotide SE	2255	9.4	12.9	13	1	ABC49343	Oligonucleotide SE
2183	9.4	12.9	13	1	ABF80120	Oligonucleotide SE	2256	9.4	12.9	13	1	ABG99598	Oligonucleotide SE
2184	9.4	12.9	13	1	ABF84017	Oligonucleotide SE	2257	9.4	12.9	13	1	ABF00358	Oligonucleotide SE
2185	9.4	12.9	13	1	ABF84447	Oligonucleotide SE	2258	9.4	12.9	13	1	ABC76826	Oligonucleotide SE
2186	9.4	12.9	13	1	ABH11656	Oligonucleotide SE	2259	9.4	12.9	13	1	ABF02166	Oligonucleotide SE
2187	9.4	12.9	13	1	ABH36777	Oligonucleotide SE	2260	9.4	12.9	13	1	ABF78032	Oligonucleotide SE
2188	9.4	12.9	13	1	ABF89074	Oligonucleotide SE	2261	9.4	12.9	13	1	ABG04590	Oligonucleotide SE
2189	9.4	12.9	13	1	ABF64992	Oligonucleotide SE	2262	9.4	12.9	13	1	ABF07529	Oligonucleotide SE
2190	9.4	12.9	13	1	ABH41302	Oligonucleotide SE	2263	9.4	12.9	13	1	ABCL1211	Oligonucleotide SE
2191	9.4	12.9	13	1	ABH45111	Oligonucleotide SE	2264	9.4	12.9	13	1	ABF12307	Oligonucleotide SE
2192	9.4	12.9	13	1	ABH51806	Oligonucleotide SE	2265	9.4	12.9	13	1	ABC64238	Oligonucleotide SE
2193	9.4	12.9	13	1	ABH59080	Oligonucleotide SE	2266	9.4	12.9	13	1	ABF20919	Oligonucleotide SE
2194	9.4	12.9	13	1	ABH61585	Oligonucleotide SE	2267	9.4	12.9	13	1	ABF22314	Oligonucleotide SE
2195	9.4	12.9	13	1	ABG94167	Oligonucleotide SE	2268	9.4	12.9	13	1	ABF22315	Oligonucleotide SE
2196	9.4	12.9	13	1	ABF70879	Oligonucleotide SE	2269	9.4	12.9	13	1	ABF31639	Oligonucleotide SE
2197	9.4	12.9	13	1	ABF00359	Oligonucleotide SE	2270	9.4	12.9	13	1	ABF36399	Oligonucleotide SE
2198	9.4	12.9	13	1	ABF76021	Oligonucleotide SE	2271	9.4	12.9	13	1	ABF39205	Oligonucleotide SE
2199	9.4	12.9	13	1	ABF01247	Oligonucleotide SE	2272	9.4	12.9	13	1	ABH18708	Oligonucleotide SE
2200	9.4	12.9	13	1	ABF76319	Oligonucleotide SE	2273	9.4	12.9	13	1	ABH19412	Oligonucleotide SE
2201	9.4	12.9	13	1	ABF02167	Oligonucleotide SE	2274	9.4	12.9	13	1	ABF95992	Oligonucleotide SE
2202	9.4	12.9	13	1	ABF03953	Oligonucleotide SE	2275	9.4	12.9	13	1	ABF73484	Oligonucleotide SE
2203	9.4	12.9	13	1	ABG81755	Oligonucleotide SE	2276	9.4	12.9	13	1	ABF98718	Oligonucleotide SE
2204	9.4	12.9	13	1	ABG34458	Oligonucleotide SE	2277	9.4	12.9	13	1	ABF99598	Oligonucleotide SE
2205	9.4	12.9	13	1	ABC12759	Oligonucleotide SE	2278	9.4	12.9	13	1	ABF76919	Oligonucleotide SE
2206	9.4	12.9	13	1	ABC37822	Oligonucleotide SE	2279	9.4	12.9	13	1	ABF77163	Oligonucleotide SE
2207	9.4	12.9	13	1	ABC37823	Oligonucleotide SE	2280	9.4	12.9	13	1	ABF77491	Oligonucleotide SE
2208	9.4	12.9	13	1	ABC88873	Oligonucleotide SE	2281	9.4	12.9	13	1	ABH03292	Oligonucleotide SE
2209	9.4	12.9	13	1	ABR13696	Oligonucleotide SE	2282	9.4	12.9	13	1	ABH03293	Oligonucleotide SE
2210	9.4	12.9	13	1	ABC39013	Oligonucleotide SE	2283	9.4	12.9	13	1	ABF54514	Oligonucleotide SE
2211	9.4	12.9	13	1	ABC15494	Oligonucleotide SE	2284	9.4	12.9	13	1	ABF84446	Oligonucleotide SE
2212	9.4	12.9	13	1	ABC65724	Oligonucleotide SE	2285	9.4	12.9	13	1	ABH35002	Oligonucleotide SE
2213	9.4	12.9	13	1	ABF19571	Oligonucleotide SE	2286	9.4	12.9	13	1	ABF85689	Oligonucleotide SE
2214	9.4	12.9	13	1	ABF19571	Oligonucleotide SE	2287	9.4	12.9	13	1	ABH10810	Oligonucleotide SE
2215	9.4	12.9	13	1	ABF20918	Oligonucleotide SE	2288	9.4	12.9	13	1	ABH36074	Oligonucleotide SE
2216	9.4	12.9	13	1	ABF26357	Oligonucleotide SE	2289	9.4	12.9	13	1	ABH11306	Oligonucleotide SE
2217	9.4	12.9	13	1	ABF33101	Oligonucleotide SE	2290	9.4	12.9	13	1	ABF62510	Oligonucleotide SE
2218	9.4	12.9	13	1	ABF35480	Oligonucleotide SE	2291	9.4	12.9	13	1	ABH13467	Oligonucleotide SE
2219	9.4	12.9	13	1	ABF43103	Oligonucleotide SE	2292	9.4	12.9	13	1	ABF91691	Oligonucleotide SE
2220	9.4	12.9	13	1	ABF93305	Oligonucleotide SE	2293	9.4	12.9	13	1	ABH44396	Oligonucleotide SE
2221	9.4	12.9	13	1	ABF43685	Oligonucleotide SE	2294	9.4	12.9	13	1	ABH46225	Oligonucleotide SE
2222	9.4	12.9	13	1	ABF44656	Oligonucleotide SE	2295	9.4	12.9	13	1	ABH48200	Oligonucleotide SE
2223	9.4	12.9	13	1	ABF95996	Oligonucleotide SE	2296	9.4	12.9	13	1	ABH63900	Oligonucleotide SE

2297	9.4	12.9	13	1	ABH64192	Oligonucleotide SE	c2370	9.4	12.9	13	1	ABC08882	Oligonucleotide SE
2298	9.4	12.9	13	1	ABC68000	Oligonucleotide SE	2371	9.4	12.9	13	1	ABC11858	Oligonucleotide SE
2299	9.4	12.9	13	1	ABC95528	Oligonucleotide SE	2372	9.4	12.9	13	1	ABC36332	Oligonucleotide SE
2300	9.4	12.9	13	1	ABC45646	Oligonucleotide SE	2373	9.4	12.9	13	1	ABC36333	Oligonucleotide SE
2301	9.4	12.9	13	1	ABC70878	Oligonucleotide SE	c2374	9.4	12.9	13	1	ABC88572	Oligonucleotide SE
2302	9.4	12.9	13	1	ABC71543	Oligonucleotide SE	2375	9.4	12.9	13	1	ABC14557	Oligonucleotide SE
2303	9.4	12.9	13	1	ABC50398	Oligonucleotide SE	2376	9.4	12.9	13	1	ABC63714	Oligonucleotide SE
2304	9.4	12.9	13	1	ABC51036	Oligonucleotide SE	c2377	9.4	12.9	13	1	ABC16201	Oligonucleotide SE
2305	9.4	12.9	13	1	ABC51416	Oligonucleotide SE	2378	9.4	12.9	13	1	ABC66732	Oligonucleotide SE
2306	9.4	12.9	13	1	ABF02160	Oligonucleotide SE	2379	9.4	12.9	13	1	ABF26356	Oligonucleotide SE
2307	9.4	12.9	13	1	ABC03281	Oligonucleotide SE	2380	9.4	12.9	13	1	ABF31638	Oligonucleotide SE
2308	9.4	12.9	13	1	ABC03282	Oligonucleotide SE	c2381	9.4	12.9	13	1	ABF31787	Oligonucleotide SE
2309	9.4	12.9	13	1	ABC54362	Oligonucleotide SE	2382	9.4	12.9	13	1	ABF36952	Oligonucleotide SE
c2310	9.4	12.9	13	1	ABF04553	Oligonucleotide SE	c2383	9.4	12.9	13	1	ABH18281	Oligonucleotide SE
2311	9.4	12.9	13	1	ABC55216	Oligonucleotide SE	2384	9.4	12.9	13	1	ABH18709	Oligonucleotide SE
c2312	9.4	12.9	13	1	ABC52309	Oligonucleotide SE	2385	9.4	12.9	13	1	ABF43684	Oligonucleotide SE
2313	9.4	12.9	13	1	ABF08288	Oligonucleotide SE	c2386	9.4	12.9	13	1	ABH20302	Oligonucleotide SE
c2314	9.4	12.9	13	1	ABC85621	Oligonucleotide SE	c2387	9.4	12.9	13	1	ABF48526	Oligonucleotide SE
c2315	9.4	12.9	13	1	ABF11073	Oligonucleotide SE	c2388	9.4	12.9	13	1	ABF99599	Oligonucleotide SE
c2316	9.4	12.9	13	1	ABC86657	Oligonucleotide SE	2389	9.4	12.9	13	1	ABH26157	Oligonucleotide SE
c2317	9.4	12.9	13	1	ABC39267	Oligonucleotide SE	c2390	9.4	12.9	13	1	ABH02534	Oligonucleotide SE
c2318	9.4	12.9	13	1	ABC64239	Oligonucleotide SE	2391	9.4	12.9	13	1	ABF53197	Oligonucleotide SE
c2319	9.4	12.9	13	1	ABC64623	Oligonucleotide SE	c2392	9.4	12.9	13	1	ABF84016	Oligonucleotide SE
c2320	9.4	12.9	13	1	ABC65725	Oligonucleotide SE	c2393	9.4	12.9	13	1	ABH37215	Oligonucleotide SE
c2321	9.4	12.9	13	1	ABF22977	Oligonucleotide SE	c2394	9.4	12.9	13	1	ABF63911	Oligonucleotide SE
c2322	9.4	12.9	13	1	ABF25463	Oligonucleotide SE	c2395	9.4	12.9	13	1	ABF91551	Oligonucleotide SE
c2323	9.4	12.9	13	1	ABF31385	Oligonucleotide SE	c2396	9.4	12.9	13	1	ABH41756	Oligonucleotide SE
c2324	9.4	12.9	13	1	ABF33100	Oligonucleotide SE	2397	9.4	12.9	13	1	ABH46224	Oligonucleotide SE
c2325	9.4	12.9	13	1	ABF33103	Oligonucleotide SE	c2398	9.4	12.9	13	1	ABH51302	Oligonucleotide SE
c2326	9.4	12.9	13	1	ABF93270	Oligonucleotide SE	c2399	9.4	12.9	13	1	ABH53899	Oligonucleotide SE
c2327	9.4	12.9	13	1	ABH18959	Oligonucleotide SE	c2400	9.4	12.9	13	1	ABH57301	Oligonucleotide SE
c2328	9.4	12.9	13	1	ABF94182	Oligonucleotide SE	2401	9.4	12.9	13	1	ABH65662	Oligonucleotide SE
c2329	9.4	12.9	13	1	ABF97554	Oligonucleotide SE	2402	9.4	12.9	13	1	ABC92838	Oligonucleotide SE
c2330	9.4	12.9	13	1	ABF97820	Oligonucleotide SE	2403	9.4	12.9	13	1	ABC66201	Oligonucleotide SE
c2331	9.4	12.9	13	1	ABH23859	Oligonucleotide SE	2404	9.4	12.9	13	1	ABC22206	Oligonucleotide SE
c2332	9.4	12.9	13	1	ABF99390	Oligonucleotide SE	2405	9.4	12.9	13	1	ABC97648	Oligonucleotide SE
c2333	9.4	12.9	13	1	ABF76918	Oligonucleotide SE	c2406	9.4	12.9	13	1	ABC76020	Oligonucleotide SE
c2334	9.4	12.9	13	1	ABF77490	Oligonucleotide SE	c2407	9.4	12.9	13	1	ABF01246	Oligonucleotide SE
c2335	9.4	12.9	13	1	ABF77493	Oligonucleotide SE	c2408	9.4	12.9	13	1	ABC51406	Oligonucleotide SE
c2336	9.4	12.9	13	1	ABH27857	Oligonucleotide SE	2409	9.4	12.9	13	1	ABF76825	Oligonucleotide SE
c2337	9.4	12.9	13	1	ABH03288	Oligonucleotide SE	c2410	9.4	12.9	13	1	ABF03499	Oligonucleotide SE
c2338	9.4	12.9	13	1	ABH04897	Oligonucleotide SE	2411	9.4	12.9	13	1	ABF03755	Oligonucleotide SE
c2339	9.4	12.9	13	1	ABH05320	Oligonucleotide SE	c2412	9.4	12.9	13	1	ABC03755	Oligonucleotide SE
2340	9.4	12.9	13	1	ABH32348	Oligonucleotide SE	c2413	9.4	12.9	13	1	ABC29149	Oligonucleotide SE
2341	9.4	12.9	13	1	ABF57799	Oligonucleotide SE	2414	9.4	12.9	13	1	ABC54213	Oligonucleotide SE
2342	9.4	12.9	13	1	ABF58534	Oligonucleotide SE	c2415	9.4	12.9	13	1	ABF06323	Oligonucleotide SE
2343	9.4	12.9	13	1	ABH36110	Oligonucleotide SE	c2416	9.4	12.9	13	1	ABC10379	Oligonucleotide SE
2344	9.4	12.9	13	1	ABF60976	Oligonucleotide SE	2417	9.4	12.9	13	1	ABC11857	Oligonucleotide SE
2345	9.4	12.9	13	1	ABH11416	Oligonucleotide SE	c2418	9.4	12.9	13	1	ABC11857	Oligonucleotide SE
2346	9.4	12.9	13	1	ABF62774	Oligonucleotide SE	2419	9.4	12.9	13	1	ABC12222	Oligonucleotide SE
c2347	9.4	12.9	13	1	ABH14483	Oligonucleotide SE	2420	9.4	12.9	13	1	ABC86656	Oligonucleotide SE
c2348	9.4	12.9	13	1	ABF65321	Oligonucleotide SE	c2421	9.4	12.9	13	1	ABF24039	Oligonucleotide SE
2349	9.4	12.9	13	1	ABH45848	Oligonucleotide SE	c2422	9.4	12.9	13	1	ABF25461	Oligonucleotide SE
c2350	9.4	12.9	13	1	ABH45849	Oligonucleotide SE	c2423	9.4	12.9	13	1	ABF32542	Oligonucleotide SE
c2351	9.4	12.9	13	1	ABH47705	Oligonucleotide SE	2424	9.4	12.9	13	1	ABF42385	Oligonucleotide SE
c2352	9.4	12.9	13	1	ABH59081	Oligonucleotide SE	2425	9.4	12.9	13	1	ABF43102	Oligonucleotide SE
c2353	9.4	12.9	13	1	ABH64251	Oligonucleotide SE	c2426	9.4	12.9	13	1	ABF93271	Oligonucleotide SE
2354	9.4	12.9	13	1	ABH65133	Oligonucleotide SE	2427	9.4	12.9	13	1	ABH20303	Oligonucleotide SE
c2355	9.4	12.9	13	1	ABH65663	Oligonucleotide SE	2428	9.4	12.9	13	1	ABF95997	Oligonucleotide SE
c2356	9.4	12.9	13	1	ABC93439	Oligonucleotide SE	c2429	9.4	12.9	13	1	ABF72080	Oligonucleotide SE
c2357	9.4	12.9	13	1	ABC21176	Oligonucleotide SE	2430	9.4	12.9	13	1	ABF48210	Oligonucleotide SE
2358	9.4	12.9	13	1	ABH71542	Oligonucleotide SE	c2431	9.4	12.9	13	1	ABF73485	Oligonucleotide SE
c2359	9.4	12.9	13	1	ABC21549	Oligonucleotide SE	2432	9.4	12.9	13	1	ABF48527	Oligonucleotide SE
c2360	9.4	12.9	13	1	ABH71615	Oligonucleotide SE	c2433	9.4	12.9	13	1	ABH28961	Oligonucleotide SE
2361	9.4	12.9	13	1	ABC97969	Oligonucleotide SE	c2434	9.4	12.9	13	1	ABH27292	Oligonucleotide SE
2362	9.4	12.9	13	1	ABC98916	Oligonucleotide SE	2435	9.4	12.9	13	1	ABH27853	Oligonucleotide SE
c2363	9.4	12.9	13	1	ABC48829	Oligonucleotide SE	c2436	9.4	12.9	13	1	ABH03115	Oligonucleotide SE
c2364	9.4	12.9	13	1	ABC75194	Oligonucleotide SE	c2437	9.4	12.9	13	1	ABH28111	Oligonucleotide SE
c2365	9.4	12.9	13	1	ABC03280	Oligonucleotide SE	2438	9.4	12.9	13	1	ABH29276	Oligonucleotide SE
2366	9.4	12.9	13	1	ABF03952	Oligonucleotide SE	c2439	9.4	12.9	13	1	ABH29277	Oligonucleotide SE
c2367	9.4	12.9	13	1	ABF06774	Oligonucleotide SE	2440	9.4	12.9	13	1	ABH07784	Oligonucleotide SE
c2368	9.4	12.9	13	1	ABF06775	Oligonucleotide SE	c2441	9.4	12.9	13	1	ABF57798	Oligonucleotide SE
c2369	9.4	12.9	13	1	ABC57985	Oligonucleotide SE	c2442	9.4	12.9	13	1	ABF58093	Oligonucleotide SE

2443	9.4	12.9	13	1	ABF85688	Oligonucleotide SE	2516	9.2	12.6	14	1	AAV11925	Hepatocyte growth
2444	9.4	12.9	13	1	ABH11657	Oligonucleotide SE	c2517	9.2	12.6	14	1	AAV11924	Hepatocyte growth
2445	9.4	12.9	13	1	ABH12347	Oligonucleotide SE	2518	9.2	12.6	14	1	AAV97202	Potato citrate syn
2446	9.4	12.9	13	1	ABH14482	Oligonucleotide SE	c2519	9.2	12.6	14	1	AAV61182	Human chromosome a
2447	9.4	12.9	13	1	ABH16020	Oligonucleotide SE	c2520	9.2	12.6	14	1	AAV61148	Human chromosome a
2448	9.4	12.9	13	1	ABH41300	Oligonucleotide SE	2521	9.2	12.6	14	1	AAV14931	Triple helix third
2449	9.4	12.9	13	1	ABH41555	Oligonucleotide SE	c2522	9.2	12.6	14	1	AAV14710	Triple helix third
2450	9.4	12.9	13	1	ABH43935	Oligonucleotide SE	2523	9.2	12.6	14	1	AAV14691	Triple helix third
2451	9.4	12.9	13	1	ABH53896	Oligonucleotide SE	2524	9.2	12.6	14	1	AAV14691	Human antisense ol
2452	9.4	12.9	13	1	ABH58822	Oligonucleotide SE	c2525	9.2	12.6	14	1	AAV07946	RNA oligonucleotid
2453	9.4	12.9	13	1	ABH60733	Oligonucleotide SE	c2526	9.2	12.6	14	1	AAV07946	Novel DNA chip man
2454	9.4	12.9	13	1	ABC42528	Oligonucleotide SE	2527	9.2	12.6	14	1	AAV42800	Ribozyme complex R
2455	9.4	12.9	13	1	ABC95533	Oligonucleotide SE	2528	9.2	12.6	14	1	AAV50500	Yak milk protein g
2456	9.4	12.9	13	1	ABC99599	Oligonucleotide SE	c2529	9.2	12.6	14	1	AAV50500	Retinoblastoma mut
2457	9.4	12.9	13	1	ABF02161	Oligonucleotide SE	2530	9.2	12.6	17	1	ABA77713	Retinoblastoma mut
2458	9.4	12.9	13	1	ABC27331	Oligonucleotide SE	c2531	9	12.3	10	1	AAQ96587	HIV-1 NL4-3 nef ge
2459	9.4	12.9	13	1	ABC02847	Oligonucleotide SE	c2532	9	12.3	10	1	AAQ96586	HIV-1 NL4-3 nef ge
2460	9.4	12.9	13	1	ABC02901	Oligonucleotide SE	c2533	9	12.3	10	1	AAQ08716	Potential NF-AT co
2461	9.4	12.9	13	1	ABC30462	Oligonucleotide SE	c2534	9	12.3	10	1	AAZ78093	Human dendritic ce
2462	9.4	12.9	13	1	ABF05985	Oligonucleotide SE	c2535	9	12.3	10	1	AAZ78898	Human dendritic ce
2463	9.4	12.9	13	1	ABC81438	Oligonucleotide SE	2536	9	12.3	10	1	AAZ79067	Human dendritic ce
2464	9.4	12.9	13	1	ABC58137	Oligonucleotide SE	c2537	9	12.3	10	1	AAZ81571	Metastatic breast
2465	9.4	12.9	13	1	ABC09267	Oligonucleotide SE	2538	9	12.3	10	1	AAZ81571	Metastatic breast
2466	9.4	12.9	13	1	ABC85620	Oligonucleotide SE	2539	9	12.3	10	1	AAZ84493	Metastatic breast
2467	9.4	12.9	13	1	ABC85826	Oligonucleotide SE	2540	9	12.3	10	1	AAZ85842	Metastatic breast
2468	9.4	12.9	13	1	ABC37800	Oligonucleotide SE	2541	9	12.3	10	1	AAZ80779	Metastatic breast
2469	9.4	12.9	13	1	ABC39738	Oligonucleotide SE	2542	9	12.3	10	1	AAZ82042	Metastatic breast
2470	9.4	12.9	13	1	ABC40251	Oligonucleotide SE	c2543	9	12.3	10	1	AAZ84957	Metastatic breast
2471	9.4	12.9	13	1	ABF15751	Oligonucleotide SE	c2544	9	12.3	10	1	AAH63804	Metastatic breast
2472	9.4	12.9	13	1	ABC42114	Oligonucleotide SE	c2545	9	12.3	10	1	AAH63804	Human ubiquitously
2473	9.4	12.9	13	1	ABC66733	Oligonucleotide SE	c2546	9	12.3	10	1	AAZ39280	Yeast NORF gene SA
2474	9.4	12.9	13	1	ABF19574	Oligonucleotide SE	c2547	9	12.3	10	1	AAZ39280	Yeast NORF gene SA
2475	9.4	12.9	13	1	ABF20582	Oligonucleotide SE	c2548	9	12.3	10	1	AAZ39041	Yeast NORF gene SA
2476	9.4	12.9	13	1	ABF25462	Oligonucleotide SE	c2549	9	12.3	10	1	AAZ36893	Yeast NORF gene SA
2477	9.4	12.9	13	1	ABF28735	Oligonucleotide SE	2550	9	12.3	10	1	AAZ42052	Yeast NORF gene SA
2478	9.4	12.9	13	1	ABF32538	Oligonucleotide SE	c2551	9	12.3	10	1	AAZ40411	Yeast NORF gene SA
2479	9.4	12.9	13	1	ABF32539	Oligonucleotide SE	c2552	9	12.3	10	1	AAZ40134	Yeast NORF gene SA
2480	9.4	12.9	13	1	ABF42386	Oligonucleotide SE	c2553	9	12.3	10	1	AAZ401681	Yeast NORF gene SA
2481	9.4	12.9	13	1	ABF42386	Oligonucleotide SE	c2554	9	12.3	10	1	AAZ40571	Yeast NORF gene SA
2482	9.4	12.9	13	1	ABH18280	Oligonucleotide SE	2555	9	12.3	10	1	AAZ40119	Yeast NORF gene SA
2483	9.4	12.9	13	1	ABF93666	Oligonucleotide SE	c2556	9	12.3	10	1	AAZ38371	Yeast NORF gene SA
2484	9.4	12.9	13	1	ABF48211	Oligonucleotide SE	c2557	9	12.3	10	1	AAZ36038	Yeast NORF gene SA
2485	9.4	12.9	13	1	ABH25103	Oligonucleotide SE	2558	9	12.3	10	1	AAZ68693	Human SCY2 gene a
2486	9.4	12.9	13	1	ABH01945	Oligonucleotide SE	c2559	9	12.3	10	1	ABL99034	Mouse neuronal reg
2487	9.4	12.9	13	1	ABH02045	Oligonucleotide SE	c2560	9	12.3	10	1	ABL16990	Pyridoxal (Pyridox
2488	9.4	12.9	13	1	ABH27351	Oligonucleotide SE	c2561	9	12.3	10	1	ABV84222	Human heat shock p
2489	9.4	12.9	13	1	ABH02910	Oligonucleotide SE	2562	9	12.3	10	1	ABK23610	Transcript tag DNA
2490	9.4	12.9	13	1	ABH03289	Oligonucleotide SE	2563	9	12.3	10	1	ABK54472	Primer-extension o
2491	9.4	12.9	13	1	ABH04896	Oligonucleotide SE	c2564	9	12.3	10	1	AAK98587	Human enolase 3 ge
2492	9.4	12.9	13	1	ABH05321	Oligonucleotide SE	c2565	9	12.3	10	1	ADC17774	Monobactam related
2493	9.4	12.9	13	1	ABH07785	Oligonucleotide SE	c2566	9	12.3	10	1	ADP13989	Optineurin promote
2494	9.4	12.9	13	1	ABH09785	Oligonucleotide SE	c2567	9	12.3	11	1	AAQ64023	16S rRNA gene frag
2495	9.4	12.9	13	1	ABH36776	Oligonucleotide SE	2568	9	12.3	11	1	AAQ57283	Enzymatic RNA mole
2496	9.4	12.9	13	1	ABF61733	Oligonucleotide SE	c2569	9	12.3	11	1	AAZ18912	Murine MRL SAGE ta
2497	9.4	12.9	13	1	ABF62775	Oligonucleotide SE	2570	9	12.3	11	1	AAZ32868	HBV DR region bind
2498	9.4	12.9	13	1	ABH13481	Oligonucleotide SE	2571	9	12.3	11	1	AAZ14809	Triple helix third
2499	9.4	12.9	13	1	ABF63724	Oligonucleotide SE	2572	9	12.3	11	1	AAZ14747	Triple helix third
2500	9.4	12.9	13	1	ABH41253	Oligonucleotide SE	c2573	9	12.3	11	1	ABQ86582	Human skin stress/
2501	9.4	12.9	13	1	ABH47704	Oligonucleotide SE	c2574	9	12.3	11	1	ABQ87207	Human skin stress/
2502	9.4	12.9	13	1	ABH60732	Oligonucleotide SE	c2575	9	12.3	11	1	ABV65978	Human skin EST 376
2503	9.4	12.9	13	1	ABZ72849	Oligonucleotide SE	c2576	9	12.3	11	1	ABV71682	Human skin EST 946
2504	9.4	12.9	13	1	ACD56504	IGR1 R21 ribozyme	2577	9	12.3	11	1	ABV63951	Human skin EST 173
2505	9.4	12.9	14	1	AAV71348	HBV enzymatic nucl	c2578	9	12.3	11	1	ABV65564	Human skin EST 335
2506	9.4	12.9	14	1	AAV49069	Probe 186 to Varro	c2579	9	12.3	11	1	ABV70743	Human skin EST 852
2507	9.4	12.9	14	1	AAZ14711	rb gene antisense	c2580	9	12.3	11	1	ABV71325	Human skin EST 204
2508	9.4	12.9	14	1	AAZ65640	Triple helix third	c2581	9	12.3	11	1	ABV64261	Human skin EST 911
2509	9.4	12.9	14	1	AAZ37592	Immunosuppressant	c2582	9	12.3	11	1	ABV67381	Human skin EST 516
2510	9.4	12.9	14	1	AAZ37592	PNA sequence #50 u	c2583	9	12.3	11	1	ABV71372	Human skin EST 915
2511	9.4	12.9	14	1	AAZ37592	Adenovirus minimal	c2584	9	12.3	11	1	ABV70941	Human skin EST 872
2512	9.4	12.9	14	1	AAZ37592	PNA 1 inhibiting h	c2585	9	12.3	11	1	ABV63322	Human skin EST 110
2513	9.4	12.9	14	1	AAZ37592	Animal cis-regulat	c2586	9	12.3	11	1	ABV63520	Human skin EST 130
2514	9.2	12.6	14	1	AAQ10579	probe for detectin	c2587	9	12.3	11	1	ABV63904	Human skin EST 169
2515	9.2	12.6	14	1	AAQ78469	TGF-beta gene phos	c2588	9	12.3	11	1	ABV68523	Human skin EST 630
					One from an array								



2589	9	12.3	12	1	AAx85598	Fragment of the po	c2662	9	12.3	12	1	ABI64177	Oligonucleotide pr
2590	9	12.3	12	1	AAAS5929	Adapter linker nuc	2663	9	12.3	12	1	ABH73634	Oligonucleotide pr
2591	9	12.3	12	1	AAAY3441	Linker JAL1. Sacc	c2664	9	12.3	12	1	ABH74794	Oligonucleotide pr
c2592	9	12.3	12	1	ABH95716	Oligonucleotide pr	c2665	9	12.3	12	1	ABH78946	Oligonucleotide pr
2593	9	12.3	12	1	ABH90779	Oligonucleotide pr	2666	9	12.3	12	1	ABI08267	Oligonucleotide pr
c2594	9	12.3	12	1	ABI50614	Oligonucleotide pr	c2667	9	12.3	12	1	ABI40627	Oligonucleotide pr
2595	9	12.3	12	1	ABI50922	Oligonucleotide pr	c2668	9	12.3	12	1	ABI15627	Oligonucleotide pr
c2596	9	12.3	12	1	ABI72996	Oligonucleotide pr	c2669	9	12.3	12	1	ABI44988	Oligonucleotide pr
2597	9	12.3	12	1	ABI74532	Oligonucleotide pr	2670	9	12.3	12	1	ABI67670	Oligonucleotide pr
c2598	9	12.3	12	1	ABI63362	Oligonucleotide pr	2671	9	12.3	12	1	ABI62149	Oligonucleotide pr
2599	9	12.3	12	1	ABI77757	Oligonucleotide pr	2672	9	12.3	12	1	ABI63807	Oligonucleotide pr
2600	9	12.3	12	1	ABI79905	Oligonucleotide pr	2673	9	12.3	12	1	ABI18422	Oligonucleotide pr
2601	9	12.3	12	1	ABI81603	Oligonucleotide pr	2674	9	12.3	12	1	ABI20296	Oligonucleotide pr
2602	9	12.3	12	1	ABI19581	Oligonucleotide pr	2675	9	12.3	12	1	ABH96179	Oligonucleotide pr
c2603	9	12.3	12	1	ABH74720	Oligonucleotide pr	2676	9	12.3	12	1	ABH73353	Oligonucleotide pr
c2604	9	12.3	12	1	ABI26746	Oligonucleotide pr	c2677	9	12.3	12	1	ABI01165	Oligonucleotide pr
2605	9	12.3	12	1	ABI01684	Oligonucleotide pr	2678	9	12.3	12	1	ABI02686	Oligonucleotide pr
2606	9	12.3	12	1	ABI02367	Oligonucleotide pr	c2679	9	12.3	12	1	ABH85113	Oligonucleotide pr
c2607	9	12.3	12	1	ABI04593	Oligonucleotide pr	2680	9	12.3	12	1	ABI13522	Oligonucleotide pr
2608	9	12.3	12	1	ABH86165	Oligonucleotide pr	2681	9	12.3	12	1	ABI42192	Oligonucleotide pr
2609	9	12.3	12	1	ABH86427	Oligonucleotide pr	2682	9	12.3	12	1	ABI46190	Oligonucleotide pr
c2610	9	12.3	12	1	ABI45905	Oligonucleotide pr	2683	9	12.3	12	1	ABI47523	Oligonucleotide pr
2611	9	12.3	12	1	ABI48277	Oligonucleotide pr	c2684	9	12.3	12	1	ABI70334	Oligonucleotide pr
c2612	9	12.3	12	1	ABI67671	Oligonucleotide pr	2685	9	12.3	12	1	ABI74444	Oligonucleotide pr
c2613	9	12.3	12	1	ABI54939	Oligonucleotide pr	2686	9	12.3	12	1	ABI64490	Oligonucleotide pr
2614	9	12.3	12	1	ABI57288	Oligonucleotide pr	2687	9	12.3	12	1	ABI66296	Oligonucleotide pr
c2615	9	12.3	12	1	ABI71651	Oligonucleotide pr	c2688	9	12.3	12	1	ABH94348	Oligonucleotide pr
2616	9	12.3	12	1	ABI77068	Oligonucleotide pr	c2689	9	12.3	12	1	ABH73162	Oligonucleotide pr
2617	9	12.3	12	1	ABI77457	Oligonucleotide pr	c2690	9	12.3	12	1	ABH82797	Oligonucleotide pr
2618	9	12.3	12	1	ABH94731	Oligonucleotide pr	c2691	9	12.3	12	1	ABI11373	Oligonucleotide pr
c2619	9	12.3	12	1	ABH70543	Oligonucleotide pr	c2692	9	12.3	12	1	ABI50994	Oligonucleotide pr
2620	9	12.3	12	1	ABH78558	Oligonucleotide pr	c2693	9	12.3	12	1	ABI69632	Oligonucleotide pr
c2621	9	12.3	12	1	ABI03734	Oligonucleotide pr	2694	9	12.3	12	1	ABI78614	Oligonucleotide pr
c2622	9	12.3	12	1	ABI04695	Oligonucleotide pr	c2695	9	12.3	12	1	ABI66615	Oligonucleotide pr
c2623	9	12.3	12	1	ABH83878	Oligonucleotide pr	2696	9	12.3	12	1	ABI17925	Oligonucleotide pr
2624	9	12.3	12	1	ABI35233	Oligonucleotide pr	2697	9	12.3	12	1	ABH69850	Oligonucleotide pr
2625	9	12.3	12	1	ABI15017	Oligonucleotide pr	c2698	9	12.3	12	1	ABH77868	Oligonucleotide pr
c2626	9	12.3	12	1	ABI42550	Oligonucleotide pr	c2699	9	12.3	12	1	ABI06647	Oligonucleotide pr
2627	9	12.3	12	1	ABI67406	Oligonucleotide pr	2700	9	12.3	12	1	ABI32262	Oligonucleotide pr
c2628	9	12.3	12	1	ABI67441	Oligonucleotide pr	2701	9	12.3	12	1	ABI12529	Oligonucleotide pr
c2629	9	12.3	12	1	ABI58942	Oligonucleotide pr	c2702	9	12.3	12	1	ABH8958	Oligonucleotide pr
2630	9	12.3	12	1	ABI81717	Oligonucleotide pr	2703	9	12.3	12	1	ABI41480	Oligonucleotide pr
c2631	9	12.3	12	1	ABI19671	Oligonucleotide pr	c2704	9	12.3	12	1	ABH91563	Oligonucleotide pr
c2632	9	12.3	12	1	ABI04178	Oligonucleotide pr	2705	9	12.3	12	1	ABI42422	Oligonucleotide pr
c2633	9	12.3	12	1	ABI04592	Oligonucleotide pr	2706	9	12.3	12	1	ABI44935	Oligonucleotide pr
c2634	9	12.3	12	1	ABI39603	Oligonucleotide pr	c2707	9	12.3	12	1	ABI49477	Oligonucleotide pr
c2635	9	12.3	12	1	ABI40616	Oligonucleotide pr	c2708	9	12.3	12	1	ABI71445	Oligonucleotide pr
c2636	9	12.3	12	1	ABH91031	Oligonucleotide pr	2709	9	12.3	12	1	ABI72995	Oligonucleotide pr
c2637	9	12.3	12	1	ABI53904	Oligonucleotide pr	2710	9	12.3	12	1	ABH98656	Oligonucleotide pr
2638	9	12.3	12	1	ABI64374	Oligonucleotide pr	c2711	9	12.3	12	1	ABI01426	Oligonucleotide pr
2639	9	12.3	12	1	ABH67943	Oligonucleotide pr	c2712	9	12.3	12	1	ABI27240	Oligonucleotide pr
2640	9	12.3	12	1	ABH71914	Oligonucleotide pr	c2713	9	12.3	12	1	ABH77500	Oligonucleotide pr
c2641	9	12.3	12	1	ABI03735	Oligonucleotide pr	c2714	9	12.3	12	1	ABH78286	Oligonucleotide pr
2642	9	12.3	12	1	ABH79870	Oligonucleotide pr	2715	9	12.3	12	1	ABI29842	Oligonucleotide pr
c2643	9	12.3	12	1	ABI35849	Oligonucleotide pr	2716	9	12.3	12	1	ABH79871	Oligonucleotide pr
2644	9	12.3	12	1	ABI51836	Oligonucleotide pr	c2717	9	12.3	12	1	ABH87718	Oligonucleotide pr
c2645	9	12.3	12	1	ABI69523	Oligonucleotide pr	2718	9	12.3	12	1	ABI37858	Oligonucleotide pr
c2646	9	12.3	12	1	ABI56686	Oligonucleotide pr	c2719	9	12.3	12	1	ABI44974	Oligonucleotide pr
c2647	9	12.3	12	1	ABI70789	Oligonucleotide pr	2720	9	12.3	12	1	ABI53048	Oligonucleotide pr
2648	9	12.3	12	1	ABI60817	Oligonucleotide pr	2721	9	12.3	12	1	ABI55373	Oligonucleotide pr
c2649	9	12.3	12	1	ABI75739	Oligonucleotide pr	c2722	9	12.3	12	1	ABI61962	Oligonucleotide pr
c2650	9	12.3	12	1	ABI76254	Oligonucleotide pr	2723	9	12.3	12	1	ABH93614	Oligonucleotide pr
c2651	9	12.3	12	1	ABI66743	Oligonucleotide pr	c2724	9	12.3	12	1	ABH95642	Oligonucleotide pr
2652	9	12.3	12	1	ABI17700	Oligonucleotide pr	2725	9	12.3	12	1	ABI20773	Oligonucleotide pr
2653	9	12.3	12	1	ABH70316	Oligonucleotide pr	c2726	9	12.3	12	1	ABI27241	Oligonucleotide pr
2654	9	12.3	12	1	ABH77224	Oligonucleotide pr	c2727	9	12.3	12	1	ABI33479	Oligonucleotide pr
2655	9	12.3	12	1	ABH78593	Oligonucleotide pr	2728	9	12.3	12	1	ABH84492	Oligonucleotide pr
c2656	9	12.3	12	1	ABI04774	Oligonucleotide pr	c2729	9	12.3	12	1	ABI36252	Oligonucleotide pr
2657	9	12.3	12	1	ABI34418	Oligonucleotide pr	2730	9	12.3	12	1	ABH86163	Oligonucleotide pr
c2658	9	12.3	12	1	ABI112055	Oligonucleotide pr	2731	9	12.3	12	1	ABH87645	Oligonucleotide pr
2659	9	12.3	12	1	ABH90122	Oligonucleotide pr	2732	9	12.3	12	1	ABI58542	Oligonucleotide pr
2660	9	12.3	12	1	ABI68285	Oligonucleotide pr	2733	9	12.3	12	1	ABI80610	Oligonucleotide pr
c2661	9	12.3	12	1	ABI57929	Oligonucleotide pr	c2734	9	12.3	12	1	ABI17473	Oligonucleotide pr

2735	9	12.3	12	1	ABI20578	Oligonucleotide pr	c2808	9	12.3	13	1	ABH62984	Oligonucleotide SE
2736	9	12.3	12	1	ABI23817	Oligonucleotide pr	2809	9	12.3	13	1	ABH64321	Oligonucleotide SE
2737	9	12.3	12	1	ABI12531	Oligonucleotide pr	2810	9	12.3	13	1	ABC42332	Oligonucleotide SE
2738	9	12.3	12	1	ABI39602	Oligonucleotide pr	c2811	9	12.3	13	1	ABC94238	Oligonucleotide SE
2739	9	12.3	12	1	ABI52286	Oligonucleotide pr	c2812	9	12.3	13	1	ABC94527	Oligonucleotide SE
2740	9	12.3	12	1	ABI75107	Oligonucleotide pr	2813	9	12.3	13	1	ABC95566	Oligonucleotide SE
2741	9	12.3	12	1	ABI77250	Oligonucleotide pr	c2814	9	12.3	13	1	ABC95567	Oligonucleotide SE
2742	9	12.3	12	1	ABI79569	Oligonucleotide pr	c2815	9	12.3	13	1	ABC28027	Oligonucleotide SE
2743	9	12.3	12	1	ABI80054	Oligonucleotide pr	c2816	9	12.3	13	1	ABC54407	Oligonucleotide SE
2744	9	12.3	12	1	ABI80285	Oligonucleotide pr	2817	9	12.3	13	1	ABC05358	Oligonucleotide SE
2745	9	12.3	12	1	ABI18521	Oligonucleotide pr	2818	9	12.3	13	1	ABF07561	Oligonucleotide SE
2746	9	12.3	12	1	ABH95794	Oligonucleotide pr	c2819	9	12.3	13	1	ABF08512	Oligonucleotide SE
2747	9	12.3	12	1	ABH71477	Oligonucleotide pr	2820	9	12.3	13	1	ABC34442	Oligonucleotide SE
2748	9	12.3	12	1	ABH98680	Oligonucleotide pr	2821	9	12.3	13	1	ABC62783	Oligonucleotide SE
2749	9	12.3	12	1	ABH83505	Oligonucleotide pr	c2822	9	12.3	13	1	ABC63293	Oligonucleotide SE
2750	9	12.3	12	1	ABH90123	Oligonucleotide pr	2823	9	12.3	13	1	ABF14655	Oligonucleotide SE
2751	9	12.3	12	1	ABI55152	Oligonucleotide pr	2824	9	12.3	13	1	ABF15154	Oligonucleotide SE
2752	9	12.3	12	1	ABI76585	Oligonucleotide pr	c2825	9	12.3	13	1	ABF16824	Oligonucleotide SE
2753	9	12.3	12	1	ABH81153	Oligonucleotide pr	c2826	9	12.3	13	1	ABF16828	Oligonucleotide SE
2754	9	12.3	12	1	ABH68821	Oligonucleotide pr	2827	9	12.3	13	1	ABF27228	Oligonucleotide SE
2755	9	12.3	12	1	ABI04504	Oligonucleotide pr	c2828	9	12.3	13	1	ABF30874	Oligonucleotide SE
2756	9	12.3	12	1	ABH81368	Oligonucleotide pr	2829	9	12.3	13	1	ABF32752	Oligonucleotide SE
2757	9	12.3	12	1	ABI47930	Oligonucleotide pr	c2830	9	12.3	13	1	ABF40352	Oligonucleotide SE
2758	9	12.3	12	1	ABI54931	Oligonucleotide pr	2831	9	12.3	13	1	ABF67405	Oligonucleotide SE
2759	9	12.3	12	1	ABI60048	Oligonucleotide pr	c2832	9	12.3	13	1	ABH18783	Oligonucleotide SE
2760	9	12.3	12	1	ABI81172	Oligonucleotide pr	2833	9	12.3	13	1	ABF69193	Oligonucleotide SE
2761	9	12.3	12	1	ABI119954	Oligonucleotide pr	2834	9	12.3	13	1	ABF96352	Oligonucleotide SE
2762	9	12.3	12	1	ABI21828	Oligonucleotide pr	2835	9	12.3	13	1	ABF97054	Oligonucleotide SE
2763	9	12.3	12	1	ABI25990	Oligonucleotide pr	2836	9	12.3	13	1	ABH22592	Oligonucleotide SE
2764	9	12.3	12	1	ABH77554	Oligonucleotide pr	c2837	9	12.3	13	1	ABF74096	Oligonucleotide SE
2765	9	12.3	12	1	ABI04842	Oligonucleotide pr	c2838	9	12.3	13	1	ABF50939	Oligonucleotide SE
2766	9	12.3	12	1	ABI38582	Oligonucleotide pr	2839	9	12.3	13	1	ABF79809	Oligonucleotide SE
2767	9	12.3	12	1	ABI15018	Oligonucleotide pr	c2840	9	12.3	13	1	ABH06811	Oligonucleotide SE
2768	9	12.3	12	1	ABI44975	Oligonucleotide pr	c2841	9	12.3	13	1	ABF85211	Oligonucleotide SE
2769	9	12.3	12	1	ABI53781	Oligonucleotide pr	c2842	9	12.3	13	1	ABF87395	Oligonucleotide SE
2770	9	12.3	12	1	ABI57395	Oligonucleotide pr	c2843	9	12.3	13	1	ABF64049	Oligonucleotide SE
2771	9	12.3	12	1	ABI66046	Oligonucleotide pr	2844	9	12.3	13	1	ABF92043	Oligonucleotide SE
2772	9	12.3	12	1	ABI81849	Oligonucleotide pr	c2845	9	12.3	13	1	ABH45813	Oligonucleotide SE
2773	9	12.3	12	1	AD45532	JALI linker DNA us	2846	9	12.3	13	1	ABH57916	Oligonucleotide SE
2774	9	12.3	12	1	AD24746	Human NAT2 mutant	2847	9	12.3	13	1	ABH61170	Oligonucleotide SE
2775	9	12.3	13	1	AA704326	Sense strand of se	2848	9	12.3	13	1	ABH61416	Oligonucleotide SE
2776	9	12.3	13	1	AAV14080	Primer AML1EVI2820	c2849	9	12.3	13	1	ABC43717	Oligonucleotide SE
2777	9	12.3	13	1	AAV13242	Probe used in DNA	2850	9	12.3	13	1	ABC73752	Oligonucleotide SE
2778	9	12.3	13	1	AAV34128	Oligonucleotide #2	c2851	9	12.3	13	1	ABC74363	Oligonucleotide SE
2779	9	12.3	13	1	AAV00579	Probe (B) for dete	2852	9	12.3	13	1	ABC32864	Oligonucleotide SE
2780	9	12.3	13	1	AAZ92440	Rhizoctonia sp. PC	c2853	9	12.3	13	1	ABC84875	Oligonucleotide SE
2781	9	12.3	13	1	AAZ65842	Immunosuppressant	2854	9	12.3	13	1	ABF10144	Oligonucleotide SE
2782	9	12.3	13	1	ABC42713	Oligonucleotide SE	c2855	9	12.3	13	1	ABC37554	Oligonucleotide SE
2783	9	12.3	13	1	ABC68634	Oligonucleotide SE	2856	9	12.3	13	1	ABF15968	Oligonucleotide SE
2784	9	12.3	13	1	ABC72992	Oligonucleotide SE	2857	9	12.3	13	1	ABF27200	Oligonucleotide SE
2785	9	12.3	13	1	ABC06587	Oligonucleotide SE	2858	9	12.3	13	1	ABF31469	Oligonucleotide SE
2786	9	12.3	13	1	ABC57583	Oligonucleotide SE	2859	9	12.3	13	1	ABF33098	Oligonucleotide SE
2787	9	12.3	13	1	ABC83127	Oligonucleotide SE	c2860	9	12.3	13	1	ABF40970	Oligonucleotide SE
2788	9	12.3	13	1	ABF09982	Oligonucleotide SE	c2861	9	12.3	13	1	ABF50637	Oligonucleotide SE
2789	9	12.3	13	1	ABC86570	Oligonucleotide SE	c2862	9	12.3	13	1	ABF53615	Oligonucleotide SE
2790	9	12.3	13	1	ABC63977	Oligonucleotide SE	c2863	9	12.3	13	1	ABF37379	Oligonucleotide SE
2791	9	12.3	13	1	ABF16745	Oligonucleotide SE	2864	9	12.3	13	1	ABF87390	Oligonucleotide SE
2792	9	12.3	13	1	ABF31468	Oligonucleotide SE	c2865	9	12.3	13	1	ABH53730	Oligonucleotide SE
2793	9	12.3	13	1	ABF32753	Oligonucleotide SE	c2866	9	12.3	13	1	ABH56164	Oligonucleotide SE
2794	9	12.3	13	1	ABF42121	Oligonucleotide SE	2867	9	12.3	13	1	ABC94239	Oligonucleotide SE
2795	9	12.3	13	1	ABF42133	Oligonucleotide SE	2868	9	12.3	13	1	ABC72152	Oligonucleotide SE
2796	9	12.3	13	1	ABF42529	Oligonucleotide SE	c2869	9	12.3	13	1	ABC73753	Oligonucleotide SE
2797	9	12.3	13	1	ABF69028	Oligonucleotide SE	2870	9	12.3	13	1	ABC24388	Oligonucleotide SE
2798	9	12.3	13	1	ABF69029	Oligonucleotide SE	2871	9	12.3	13	1	ABC26261	Oligonucleotide SE
2799	9	12.3	13	1	ABF99611	Oligonucleotide SE	2872	9	12.3	13	1	ABC58871	Oligonucleotide SE
2800	9	12.3	13	1	ABF50897	Oligonucleotide SE	2873	9	12.3	13	1	ABC58963	Oligonucleotide SE
2801	9	12.3	13	1	ABF54252	Oligonucleotide SE	2874	9	12.3	13	1	ABC10608	Oligonucleotide SE
2802	9	12.3	13	1	ABF55774	Oligonucleotide SE	2875	9	12.3	13	1	ABC11794	Oligonucleotide SE
2803	9	12.3	13	1	ABF57869	Oligonucleotide SE	2876	9	12.3	13	1	ABC61054	Oligonucleotide SE
2804	9	12.3	13	1	ABH33439	Oligonucleotide SE	2877	9	12.3	13	1	ABF11491	Oligonucleotide SE
2805	9	12.3	13	1	ABH12772	Oligonucleotide SE	2878	9	12.3	13	1	ABC86571	Oligonucleotide SE
2806	9	12.3	13	1	ABF64048	Oligonucleotide SE	c2879	9	12.3	13	1	ABC13536	Oligonucleotide SE
2807	9	12.3	13	1	ABF92042	Oligonucleotide SE	c2880	9	12.3	13	1	ABC65875	Oligonucleotide SE

c2881	9	12.3	13	1	ABF18548	Oligonucleotide SE
c2882	9	12.3	13	1	ABF27201	Oligonucleotide SE
c2883	9	12.3	13	1	ABF33096	Oligonucleotide SE
c2884	9	12.3	13	1	ABF42120	Oligonucleotide SE
c2885	9	12.3	13	1	ABH20251	Oligonucleotide SE
c2886	9	12.3	13	1	ABH20251	Oligonucleotide SE
c2887	9	12.3	13	1	ABH22111	Oligonucleotide SE
c2888	9	12.3	13	1	ABF98783	Oligonucleotide SE
c2889	9	12.3	13	1	ABF99178	Oligonucleotide SE
c2890	9	12.3	13	1	ABH26995	Oligonucleotide SE
c2891	9	12.3	13	1	ABF78787	Oligonucleotide SE
c2892	9	12.3	13	1	ABH29133	Oligonucleotide SE
c2893	9	12.3	13	1	ABF54385	Oligonucleotide SE
c2894	9	12.3	13	1	ABH36950	Oligonucleotide SE
c2895	9	12.3	13	1	ABF91581	Oligonucleotide SE
c2896	9	12.3	13	1	ABH48162	Oligonucleotide SE
c2897	9	12.3	13	1	ABH49387	Oligonucleotide SE
c2898	9	12.3	13	1	ABH64320	Oligonucleotide SE
c2899	9	12.3	13	1	ABC42712	Oligonucleotide SE
c2900	9	12.3	13	1	ABC68720	Oligonucleotide SE
c2901	9	12.3	13	1	ABC69616	Oligonucleotide SE
c2902	9	12.3	13	1	ABC47613	Oligonucleotide SE
c2903	9	12.3	13	1	ABC76837	Oligonucleotide SE
c2904	9	12.3	13	1	ABC04536	Oligonucleotide SE
c2905	9	12.3	13	1	ABC79138	Oligonucleotide SE
c2906	9	12.3	13	1	ABC07318	Oligonucleotide SE
c2907	9	12.3	13	1	ABF07560	Oligonucleotide SE
c2908	9	12.3	13	1	ABC57582	Oligonucleotide SE
c2909	9	12.3	13	1	ABF08513	Oligonucleotide SE
c2910	9	12.3	13	1	ABC58870	Oligonucleotide SE
c2911	9	12.3	13	1	ABC34443	Oligonucleotide SE
c2912	9	12.3	13	1	ABC63292	Oligonucleotide SE
c2913	9	12.3	13	1	ABC14398	Oligonucleotide SE
c2914	9	12.3	13	1	ABF27229	Oligonucleotide SE
c2915	9	12.3	13	1	ABH18782	Oligonucleotide SE
c2916	9	12.3	13	1	ABF69142	Oligonucleotide SE
c2917	9	12.3	13	1	ABH00055	Oligonucleotide SE
c2918	9	12.3	13	1	ABF52508	Oligonucleotide SE
c2919	9	12.3	13	1	ABF55718	Oligonucleotide SE
c2920	9	12.3	13	1	ABF85999	Oligonucleotide SE
c2921	9	12.3	13	1	ABH36951	Oligonucleotide SE
c2922	9	12.3	13	1	ABH42698	Oligonucleotide SE
c2923	9	12.3	13	1	ABH45812	Oligonucleotide SE
c2924	9	12.3	13	1	ABH48112	Oligonucleotide SE
c2925	9	12.3	13	1	ABH49518	Oligonucleotide SE
c2926	9	12.3	13	1	ABH56165	Oligonucleotide SE
c2927	9	12.3	13	1	ABH58385	Oligonucleotide SE
c2928	9	12.3	13	1	ABH64270	Oligonucleotide SE
c2929	9	12.3	13	1	ABC42604	Oligonucleotide SE
c2930	9	12.3	13	1	ABC68272	Oligonucleotide SE
c2931	9	12.3	13	1	ABC68635	Oligonucleotide SE
c2932	9	12.3	13	1	ABC69660	Oligonucleotide SE
c2933	9	12.3	13	1	ABC26052	Oligonucleotide SE
c2934	9	12.3	13	1	ABC51257	Oligonucleotide SE
c2935	9	12.3	13	1	ABC52699	Oligonucleotide SE
c2936	9	12.3	13	1	ABC06586	Oligonucleotide SE
c2937	9	12.3	13	1	ABC82246	Oligonucleotide SE
c2938	9	12.3	13	1	ABC57714	Oligonucleotide SE
c2939	9	12.3	13	1	ABC58866	Oligonucleotide SE
c2940	9	12.3	13	1	ABC84467	Oligonucleotide SE
c2941	9	12.3	13	1	ABC84874	Oligonucleotide SE
c2942	9	12.3	13	1	ABC35207	Oligonucleotide SE
c2943	9	12.3	13	1	ABC65874	Oligonucleotide SE
c2944	9	12.3	13	1	ABF22309	Oligonucleotide SE
c2945	9	12.3	13	1	ABF30885	Oligonucleotide SE
c2946	9	12.3	13	1	ABF35188	Oligonucleotide SE
c2947	9	12.3	13	1	ABF35189	Oligonucleotide SE
c2948	9	12.3	13	1	ABF94714	Oligonucleotide SE
c2949	9	12.3	13	1	ABF71892	Oligonucleotide SE
c2950	9	12.3	13	1	ABF71893	Oligonucleotide SE
c2951	9	12.3	13	1	ABF73038	Oligonucleotide SE
c2952	9	12.3	13	1	ABF75024	Oligonucleotide SE
c2953	9	12.3	13	1	ABF83104	Oligonucleotide SE
c2954	9	12.3	13	1	ABF87316	Oligonucleotide SE
c2955	9	12.3	13	1	ABF63756	Oligonucleotide SE
c2956	9	12.3	13	1	ABH14429	Oligonucleotide SE
c2957	9	12.3	13	1	ABF64672	Oligonucleotide SE
c2958	9	12.3	13	1	ABF65948	Oligonucleotide SE
c2959	9	12.3	13	1	ABH49386	Oligonucleotide SE
c2960	9	12.3	13	1	ABH61171	Oligonucleotide SE
c2961	9	12.3	13	1	ABH62479	Oligonucleotide SE
c2962	9	12.3	13	1	ABC67774	Oligonucleotide SE
c2963	9	12.3	13	1	ABC93386	Oligonucleotide SE
c2964	9	12.3	13	1	ABC69071	Oligonucleotide SE
c2965	9	12.3	13	1	ABF02989	Oligonucleotide SE
c2966	9	12.3	13	1	ABC28026	Oligonucleotide SE
c2967	9	12.3	13	1	ABF10145	Oligonucleotide SE
c2968	9	12.3	13	1	ABF12492	Oligonucleotide SE
c2969	9	12.3	13	1	ABC63976	Oligonucleotide SE
c2970	9	12.3	13	1	ABC64248	Oligonucleotide SE
c2971	9	12.3	13	1	ABC90350	Oligonucleotide SE
c2972	9	12.3	13	1	ABF16744	Oligonucleotide SE
c2973	9	12.3	13	1	ABF16829	Oligonucleotide SE
c2974	9	12.3	13	1	ABF19050	Oligonucleotide SE
c2975	9	12.3	13	1	ABF19051	Oligonucleotide SE
c2976	9	12.3	13	1	ABF19824	Oligonucleotide SE
c2977	9	12.3	13	1	ABF37770	Oligonucleotide SE
c2978	9	12.3	13	1	ABF37771	Oligonucleotide SE
c2979	9	12.3	13	1	ABF42132	Oligonucleotide SE
c2980	9	12.3	13	1	ABF95851	Oligonucleotide SE
c2981	9	12.3	13	1	ABF46744	Oligonucleotide SE
c2982	9	12.3	13	1	ABF97553	Oligonucleotide SE
c2983	9	12.3	13	1	ABH22593	Oligonucleotide SE
c2984	9	12.3	13	1	ABH26167	Oligonucleotide SE
c2985	9	12.3	13	1	ABH26994	Oligonucleotide SE
c2986	9	12.3	13	1	ABF78786	Oligonucleotide SE
c2987	9	12.3	13	1	ABF55296	Oligonucleotide SE
c2988	9	12.3	13	1	ABF58426	Oligonucleotide SE
c2989	9	12.3	13	1	ABF86233	Oligonucleotide SE
c2990	9	12.3	13	1	ABH13339	Oligonucleotide SE
c2991	9	12.3	13	1	ABF91390	Oligonucleotide SE
c2992	9	12.3	13	1	ABH57233	Oligonucleotide SE
c2993	9	12.3	13	1	ABH58384	Oligonucleotide SE
c2994	9	12.3	13	1	ABC69661	Oligonucleotide SE
c2995	9	12.3	13	1	ABC23823	Oligonucleotide SE
c2996	9	12.3	13	1	ABC74243	Oligonucleotide SE
c2997	9	12.3	13	1	ABC26053	Oligonucleotide SE
c2998	9	12.3	13	1	ABC26260	Oligonucleotide SE
c2999	9	12.3	13	1	ABF01309	Oligonucleotide SE
c3000	9	12.3	13	1	ABC76836	Oligonucleotide SE
c3001	9	12.3	13	1	ABC28050	Oligonucleotide SE
c3002	9	12.3	13	1	ABC04537	Oligonucleotide SE
c3003	9	12.3	13	1	ABC31014	Oligonucleotide SE
c3004	9	12.3	13	1	ABC06713	Oligonucleotide SE
c3005	9	12.3	13	1	ABF11490	Oligonucleotide SE
c3006	9	12.3	13	1	ABF12491	Oligonucleotide SE
c3007	9	12.3	13	1	ABC90353	Oligonucleotide SE
c3008	9	12.3	13	1	ABF18549	Oligonucleotide SE
c3009	9	12.3	13	1	ABF19502	Oligonucleotide SE
c3010	9	12.3	13	1	ABF67571	Oligonucleotide SE
c3011	9	12.3	13	1	ABF93597	Oligonucleotide SE
c3012	9	12.3	13	1	ABH19780	Oligonucleotide SE
c3013	9	12.3	13	1	ABF95850	Oligonucleotide SE
c3014	9	12.3	13	1	ABF97055	Oligonucleotide SE
c3015	9	12.3	13	1	ABH22862	Oligonucleotide SE
c3016	9	12.3	13	1	ABH22863	Oligonucleotide SE
c3017	9	12.3	13	1	ABF53614	Oligonucleotide SE
c3018	9	12.3	13	1	ABF82802	Oligonucleotide SE
c3019	9	12.3	13	1	ABH12773	Oligonucleotide SE
c3020	9	12.3	13	1	ABH41563	Oligonucleotide SE
c3021	9	12.3	13	1	ABH45605	Oligonucleotide SE
c3022	9	12.3	13	1	ABH62478	Oligonucleotide SE
c3023	9	12.3	13	1	ABH62903	Oligonucleotide SE
c3024	9	12.3	13	1	ABC68273	Oligonucleotide SE
c3025	9	12.3	13	1	ABC69070	Oligonucleotide SE
c3026	9	12.3	13	1	ABC45131	Oligonucleotide SE

33027	9	12.3	13	1	ABC47612	Oligonucleotide SE	c3100	9	12.3	13	1	ABC56915	Oligonucleotide SE
33028	9	12.3	13	1	ABC72753	Oligonucleotide SE	c3101	9	12.3	13	1	ABC83126	Oligonucleotide SE
33029	9	12.3	13	1	ABF01103	Oligonucleotide SE	3102	9	12.3	13	1	ABC09627	Oligonucleotide SE
33030	9	12.3	13	1	ABC01413	Oligonucleotide SE	3103	9	12.3	13	1	ABC10634	Oligonucleotide SE
33031	9	12.3	13	1	ABF01308	Oligonucleotide SE	c3104	9	12.3	13	1	ABC61055	Oligonucleotide SE
33032	9	12.3	13	1	ABC79139	Oligonucleotide SE	c3105	9	12.3	13	1	ABC87509	Oligonucleotide SE
33033	9	12.3	13	1	ABC04718	Oligonucleotide SE	c3106	9	12.3	13	1	ABC62782	Oligonucleotide SE
33034	9	12.3	13	1	ABC63699	Oligonucleotide SE	c3107	9	12.3	13	1	ABC88438	Oligonucleotide SE
33035	9	12.3	13	1	ABC90351	Oligonucleotide SE	3108	9	12.3	13	1	ABC64249	Oligonucleotide SE
33036	9	12.3	13	1	ABF19503	Oligonucleotide SE	3109	9	12.3	13	1	ABF15156	Oligonucleotide SE
33037	9	12.3	13	1	ABF33097	Oligonucleotide SE	c3110	9	12.3	13	1	ABF22308	Oligonucleotide SE
33038	9	12.3	13	1	ABF39141	Oligonucleotide SE	c3111	9	12.3	13	1	ABF26005	Oligonucleotide SE
33039	9	12.3	13	1	ABF45493	Oligonucleotide SE	3112	9	12.3	13	1	ABF40353	Oligonucleotide SE
33040	9	12.3	13	1	ABF73039	Oligonucleotide SE	c3113	9	12.3	13	1	ABF40354	Oligonucleotide SE
33041	9	12.3	13	1	ABF99179	Oligonucleotide SE	c3114	9	12.3	13	1	ABF94867	Oligonucleotide SE
33042	9	12.3	13	1	ABF50734	Oligonucleotide SE	c3115	9	12.3	13	1	ABF46239	Oligonucleotide SE
33043	9	12.3	13	1	ABF52509	Oligonucleotide SE	c3116	9	12.3	13	1	ABF46626	Oligonucleotide SE
33044	9	12.3	13	1	ABH32688	Oligonucleotide SE	3117	9	12.3	13	1	ABF97552	Oligonucleotide SE
33045	9	12.3	13	1	ABH08413	Oligonucleotide SE	3118	9	12.3	13	1	ABF99610	Oligonucleotide SE
33046	9	12.3	13	1	ABH33666	Oligonucleotide SE	3119	9	12.3	13	1	ABF50938	Oligonucleotide SE
33047	9	12.3	13	1	ABF84617	Oligonucleotide SE	c3120	9	12.3	13	1	ABF83105	Oligonucleotide SE
33048	9	12.3	13	1	ABH37378	Oligonucleotide SE	3121	9	12.3	13	1	ABF08412	Oligonucleotide SE
33049	9	12.3	13	1	ABF87724	Oligonucleotide SE	c3122	9	12.3	13	1	ABF83319	Oligonucleotide SE
33050	9	12.3	13	1	ABH14428	Oligonucleotide SE	c3123	9	12.3	13	1	ABF58427	Oligonucleotide SE
33051	9	12.3	13	1	ABH15416	Oligonucleotide SE	3124	9	12.3	13	1	ABH33667	Oligonucleotide SE
33052	9	12.3	13	1	ABH49633	Oligonucleotide SE	3125	9	12.3	13	1	ABH11241	Oligonucleotide SE
33053	9	12.3	13	1	ABC93065	Oligonucleotide SE	3126	9	12.3	13	1	ABH13705	Oligonucleotide SE
33054	9	12.3	13	1	ABC93387	Oligonucleotide SE	3127	9	12.3	13	1	ABF88643	Oligonucleotide SE
33055	9	12.3	13	1	ABC21582	Oligonucleotide SE	3128	9	12.3	13	1	ABF65949	Oligonucleotide SE
33056	9	12.3	13	1	ABC72752	Oligonucleotide SE	3129	9	12.3	13	1	ABF91391	Oligonucleotide SE
33057	9	12.3	13	1	ABC98320	Oligonucleotide SE	c3130	9	12.3	13	1	ABH45604	Oligonucleotide SE
33058	9	12.3	13	1	ABC28792	Oligonucleotide SE	c3131	9	12.3	13	1	ABH48163	Oligonucleotide SE
33059	9	12.3	13	1	ABC30021	Oligonucleotide SE	3132	9	12.3	13	1	ABH62985	Oligonucleotide SE
33060	9	12.3	13	1	ABC05633	Oligonucleotide SE	3133	9	12.3	13	1	ABC95126	Oligonucleotide SE
33061	9	12.3	13	1	ABC07085	Oligonucleotide SE	c3134	9	12.3	13	1	ABC95127	Oligonucleotide SE
33062	9	12.3	13	1	ABC07439	Oligonucleotide SE	3135	9	12.3	13	1	ABC23822	Oligonucleotide SE
33063	9	12.3	13	1	ABC56914	Oligonucleotide SE	c3136	9	12.3	13	1	ABC74242	Oligonucleotide SE
33064	9	12.3	13	1	ABC32665	Oligonucleotide SE	3137	9	12.3	13	1	ABC49174	Oligonucleotide SE
33065	9	12.3	13	1	ABC84466	Oligonucleotide SE	c3138	9	12.3	13	1	ABC74793	Oligonucleotide SE
33066	9	12.3	13	1	ABC10635	Oligonucleotide SE	3139	9	12.3	13	1	ABC01412	Oligonucleotide SE
33067	9	12.3	13	1	ABC35057	Oligonucleotide SE	c3140	9	12.3	13	1	ABC06460	Oligonucleotide SE
33068	9	12.3	13	1	ABF12490	Oligonucleotide SE	c3141	9	12.3	13	1	ABC06712	Oligonucleotide SE
33069	9	12.3	13	1	ABC37555	Oligonucleotide SE	3142	9	12.3	13	1	ABC57715	Oligonucleotide SE
33070	9	12.3	13	1	ABC87508	Oligonucleotide SE	3143	9	12.3	13	1	ABC13537	Oligonucleotide SE
33071	9	12.3	13	1	ABC64902	Oligonucleotide SE	3144	9	12.3	13	1	ABC88439	Oligonucleotide SE
33072	9	12.3	13	1	ABF30884	Oligonucleotide SE	3145	9	12.3	13	1	ABC14399	Oligonucleotide SE
33073	9	12.3	13	1	ABF37417	Oligonucleotide SE	c3146	9	12.3	13	1	ABF15155	Oligonucleotide SE
33074	9	12.3	13	1	ABF67623	Oligonucleotide SE	3147	9	12.3	13	1	ABF26004	Oligonucleotide SE
33075	9	12.3	13	1	ABF69143	Oligonucleotide SE	3148	9	12.3	13	1	ABF27636	Oligonucleotide SE
33076	9	12.3	13	1	ABH19781	Oligonucleotide SE	c3149	9	12.3	13	1	ABF39140	Oligonucleotide SE
33077	9	12.3	13	1	ABF70317	Oligonucleotide SE	3150	9	12.3	13	1	ABF98782	Oligonucleotide SE
33078	9	12.3	13	1	ABF70798	Oligonucleotide SE	c3151	9	12.3	13	1	ABH06169	Oligonucleotide SE
33079	9	12.3	13	1	ABF46238	Oligonucleotide SE	c3152	9	12.3	13	1	ABF56728	Oligonucleotide SE
33080	9	12.3	13	1	ABH22110	Oligonucleotide SE	3153	9	12.3	13	1	ABF56729	Oligonucleotide SE
33081	9	12.3	13	1	ABF74087	Oligonucleotide SE	c3154	9	12.3	13	1	ABH32689	Oligonucleotide SE
33082	9	12.3	13	1	ABF99809	Oligonucleotide SE	3155	9	12.3	13	1	ABH33318	Oligonucleotide SE
33083	9	12.3	13	1	ABH26166	Oligonucleotide SE	c3156	9	12.3	13	1	ABF91580	Oligonucleotide SE
33084	9	12.3	13	1	ABF54253	Oligonucleotide SE	3157	9	12.3	13	1	ABH61884	Oligonucleotide SE
33085	9	12.3	13	1	ABH31033	Oligonucleotide SE	c3158	9	12.3	13	1	ABC43716	Oligonucleotide SE
33086	9	12.3	13	1	ABH06168	Oligonucleotide SE	3159	9	12.3	13	1	ABC69617	Oligonucleotide SE
33087	9	12.3	13	1	ABF57868	Oligonucleotide SE	c3160	9	12.3	13	1	ABC72153	Oligonucleotide SE
33088	9	12.3	13	1	ABH10089	Oligonucleotide SE	3161	9	12.3	13	1	ABC49175	Oligonucleotide SE
33089	9	12.3	13	1	ABF60290	Oligonucleotide SE	3162	9	12.3	13	1	ABC74792	Oligonucleotide SE
33090	9	12.3	13	1	ABF64673	Oligonucleotide SE	c3163	9	12.3	13	1	ABC00207	Oligonucleotide SE
33091	9	12.3	13	1	ABH55806	Oligonucleotide SE	3164	9	12.3	13	1	ABF01102	Oligonucleotide SE
33092	9	12.3	13	1	ABH57232	Oligonucleotide SE	3165	9	12.3	13	1	ABC51256	Oligonucleotide SE
33093	9	12.3	13	1	ABH57917	Oligonucleotide SE	3166	9	12.3	13	1	ABC28793	Oligonucleotide SE
33094	9	12.3	13	1	ABC94526	Oligonucleotide SE	3167	9	12.3	13	1	ABC30078	Oligonucleotide SE
33095	9	12.3	13	1	ABC21583	Oligonucleotide SE	3168	9	12.3	13	1	ABC31015	Oligonucleotide SE
33096	9	12.3	13	1	ABC98321	Oligonucleotide SE	c3169	9	12.3	13	1	ABC07438	Oligonucleotide SE
33097	9	12.3	13	1	ABC28051	Oligonucleotide SE	3170	9	12.3	13	1	ABF07564	Oligonucleotide SE
33098	9	12.3	13	1	ABC06461	Oligonucleotide SE	c3171	9	12.3	13	1	ABC09626	Oligonucleotide SE
33099	9	12.3	13	1	ABC07319	Oligonucleotide SE	3172	9	12.3	13	1	ABC35206	Oligonucleotide SE

C3173	9	12.3	13	1	ABC64903	3246	9	12.3	13	1	ABC54406	Oligonucleotide SE
C3174	9	12.3	13	1	ABC90352	C3247	9	12.3	13	1	ABC05359	Oligonucleotide SE
C3175	9	12.3	13	1	ABF16825	3248	9	12.3	13	1	ABC05632	Oligonucleotide SE
C3176	9	12.3	13	1	ABF19825	C3249	9	12.3	13	1	ABC07084	Oligonucleotide SE
C3177	9	12.3	13	1	ABF20970	C3250	9	12.3	13	1	ABC58962	Oligonucleotide SE
C3178	9	12.3	13	1	ABF33099	C3251	9	12.3	13	1	ABF09983	Oligonucleotide SE
C3179	9	12.3	13	1	ABF35934	3252	9	12.3	13	1	ABC64898	Oligonucleotide SE
C3180	9	12.3	13	1	ABF67404	C3253	9	12.3	13	1	ABC64899	Oligonucleotide SE
C3181	9	12.3	13	1	ABF93596	C3254	9	12.3	13	1	ABF5969	Oligonucleotide SE
C3182	9	12.3	13	1	ABF94866	3255	9	12.3	13	1	ABF20971	Oligonucleotide SE
C3183	9	12.3	13	1	ABF45492	3256	9	12.3	13	1	ABF30875	Oligonucleotide SE
C3184	9	12.3	13	1	ABF46627	3257	9	12.3	13	1	ABF35935	Oligonucleotide SE
C3185	9	12.3	13	1	ABF48745	C3258	9	12.3	13	1	ABF94715	Oligonucleotide SE
C3186	9	12.3	13	1	ABH22108	C3259	9	12.3	13	1	ABF70799	Oligonucleotide SE
C3187	9	12.3	13	1	ABH22109	C3260	9	12.3	13	1	ABF50896	Oligonucleotide SE
C3188	9	12.3	13	1	ABF99808	3261	9	12.3	13	1	ABF54384	Oligonucleotide SE
C3189	9	12.3	13	1	ABH00054	C3262	9	12.3	13	1	ABF79808	Oligonucleotide SE
C3190	9	12.3	13	1	ABH00055	3263	9	12.3	13	1	ABF55775	Oligonucleotide SE
C3191	9	12.3	13	1	ABF75025	3264	9	12.3	13	1	ABH33663	Oligonucleotide SE
C3192	9	12.3	13	1	ABF50735	3265	9	12.3	13	1	ABH09026	Oligonucleotide SE
C3193	9	12.3	13	1	ABF55297	3266	9	12.3	13	1	ABH85210	Oligonucleotide SE
C3194	9	12.3	13	1	ABH33438	C3267	9	12.3	13	1	ABF87725	Oligonucleotide SE
C3195	9	12.3	13	1	ABH09027	C3268	9	12.3	13	1	ABH44334	Oligonucleotide SE
C3196	9	12.3	13	1	ABF84616	3269	9	12.3	13	1	ABH53731	Oligonucleotide SE
C3197	9	12.3	13	1	ABH10088	3270	9	12.3	13	1	ABH61885	Oligonucleotide SE
C3198	9	12.3	13	1	ABF86232	C3271	9	12.3	13	1	ABH62902	Oligonucleotide SE
C3199	9	12.3	13	1	ABF63757	C3272	9	12.3	13	1	ABH42333	Oligonucleotide SE
C3200	9	12.3	13	1	ABF65844	C3273	9	12.3	13	1	ABC42605	Oligonucleotide SE
C3201	9	12.3	13	1	ABF90916	C3274	9	12.3	13	1	ABC67775	Oligonucleotide SE
C3202	9	12.3	13	1	ABH41562	3275	9	12.3	13	1	ABC68721	Oligonucleotide SE
C3203	9	12.3	13	1	ABH42699	3276	9	12.3	13	1	ABC00206	Oligonucleotide SE
C3204	9	12.3	13	1	ABH43248	C3277	9	12.3	13	1	ABC82247	Oligonucleotide SE
C3205	9	12.3	13	1	ABH44335	3278	9	12.3	13	1	ABC58867	Oligonucleotide SE
C3206	9	12.3	13	1	ABH48113	3279	9	12.3	13	1	ABC35056	Oligonucleotide SE
C3207	9	12.3	13	1	ABH49519	3280	9	12.3	13	1	ABC63698	Oligonucleotide SE
C3208	9	12.3	13	1	ABH55807	C3281	9	12.3	13	1	ABF15319	Oligonucleotide SE
C3209	9	12.3	13	1	ABH64271	C3282	9	12.3	13	1	ABF15157	Oligonucleotide SE
C3210	9	12.3	13	1	ABC45130	3283	9	12.3	13	1	ABF42528	Oligonucleotide SE
C3211	9	12.3	13	1	ABC72993	3284	9	12.3	13	1	ABF67570	Oligonucleotide SE
C3212	9	12.3	13	1	ABC74362	C3285	9	12.3	13	1	ABF67622	Oligonucleotide SE
C3213	9	12.3	13	1	ABC23489	C3286	9	12.3	13	1	ABF70316	Oligonucleotide SE
C3214	9	12.3	13	1	ABC52698	3287	9	12.3	13	1	ABF50636	Oligonucleotide SE
C3215	9	12.3	13	1	ABC04719	3288	9	12.3	13	1	ABH01313	Oligonucleotide SE
C3216	9	12.3	13	1	ABC30020	C3289	9	12.3	13	1	ABF55719	Oligonucleotide SE
C3217	9	12.3	13	1	ABC30079	C3290	9	12.3	13	1	ABH33662	Oligonucleotide SE
C3218	9	12.3	13	1	ABF07565	C3291	9	12.3	13	1	ABF60291	Oligonucleotide SE
C3219	9	12.3	13	1	ABC10609	3292	9	12.3	13	1	ABF85998	Oligonucleotide SE
C3220	9	12.3	13	1	ABC11795	C3293	9	12.3	13	1	ABH11240	Oligonucleotide SE
C3221	9	12.3	13	1	ABF12493	C3294	9	12.3	13	1	ABF87391	Oligonucleotide SE
C3222	9	12.3	13	1	ABC15318	3295	9	12.3	13	1	ABF87394	Oligonucleotide SE
C3223	9	12.3	13	1	ABF14654	3296	9	12.3	13	1	ABF90917	Oligonucleotide SE
C3224	9	12.3	13	1	ABF27637	C3297	9	12.3	13	1	ABH43249	Oligonucleotide SE
C3225	9	12.3	13	1	ABF37416	C3298	9	12.3	13	1	ACC78734	Oligonucleotide SE
C3226	9	12.3	13	1	ABF40355	C3299	9	12.3	13	1	ACC78848	Oligonucleotide SE
C3227	9	12.3	13	1	ABF40971	3300	9	12.3	13	1	ADC64963	Oligonucleotide SE
C3228	9	12.3	13	1	ABF69192							
C3229	9	12.3	13	1	ABF96353							
C3230	9	12.3	13	1	ABH01312							
C3231	9	12.3	13	1	ABH29132							
C3232	9	12.3	13	1	ABH31032							
C3233	9	12.3	13	1	ABH06810							
C3234	9	12.3	13	1	ABF82803							
C3235	9	12.3	13	1	ABF87317							
C3236	9	12.3	13	1	ABH13338							
C3237	9	12.3	13	1	ABH13704							
C3238	9	12.3	13	1	ABF88642							
C3239	9	12.3	13	1	ABH15417							
C3240	9	12.3	13	1	ABH40454							
C3241	9	12.3	13	1	ABH40455							
C3242	9	12.3	13	1	ABF65845							
C3243	9	12.3	13	1	ABH61417							
C3244	9	12.3	13	1	ABC93064							
C3245	9	12.3	13	1	ABF02988							

ALIGNMENTS

RESULT 1

AZ48533/c

ID AAZ48533 standard; DNA; 18 BP.

XX

AC AAZ48533;

XX

DT 31-MAR-2000 (first entry)

XX

DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18926.

XX

KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;

XX

KW inflammation; tumour formation; TNFR1; anticancer; ss.

XX

```

3 Synthetic.
4 Homo sapiens.
5 US6007995-A.
6 28-DEC-1999.
7
8 26-JUN-1998; 98US-00106038.
9
10 26-JUN-1998; 98US-00106038.
11
12 (ISIS-) ISIS PHARM INC.
13
14 Baker BF, Cowser LM;
15 WPI; 2000-105333/09.
16
17 Antisense inhibition of tumor necrosis factor type 1 expression for
18 diagnosis, treatment and prevention of disease, particularly tumors.
19
20 Claim 1; Col 25; 34pp; English.
21
22 The invention provides antisense compounds targeted to human tumour
23 necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
24 can be used in a method of inhibiting the expression of TNFR1 human cells
25 or tissues. The antisense compounds specifically hybridize with one or
26 more nucleic acids encoding TNFR1 modulating the function of nucleic acid
27 molecules encoding TNFR1, ultimately modulating the amount of TNFR1
28 produced. The antisense compounds and method are useful as research
29 reagents and diagnostics, and in the treatment and prophylaxis of
30 infection, inflammation or tumour formation. Sequences AA248482-565
31 represent antisense oligos used for inhibition of the human TNFR1 mRNA
32
33 Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
34
35 Query Match 24.7%; Score 18; DB 1; Length 18;
36 Best Local Similarity 100.0%; Pred. No. 58;
37 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
38
39 952 ATGTATCGCTACCAACGG 969
40 |||||
41 18 ATGTATCGCTACCAACGG 1
42
43 RESULT 2
44 AA248528/c
45 AA248528 standard; DNA; 18 BP.
46
47 AA248528;
48
49 31-MAR-2000 (first entry)
50
51 Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18921.
52
53 Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
54 inflammation; tumour formation; TNFR1; anticancer; ss.
55
56 Synthetic.
57 Homo sapiens.
58 US6007995-A.
59 28-DEC-1999.
60
61 26-JUN-1998; 98US-00106038.
62
63 26-JUN-1998; 98US-00106038.
64
65 (ISIS-) ISIS PHARM INC.
66
67 Baker BF, Cowser LM;
68 WPI; 2000-105333/09.

```

```

xx Antisense inhibition of tumor necrosis factor type 1 expression for
pt diagnosis, treatment and prevention of disease, particularly tumors.
xx
xx Example 10; Col 25; 34pp; English.
xx
xx The invention provides antisense compounds targeted to human tumour
cc necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
cc can be used in a method of inhibiting the expression of TNFR1 human cells
cc or tissues. The antisense compounds specifically hybridize with one or
cc more nucleic acids encoding TNFR1 modulating the function of nucleic acid
cc molecules encoding TNFR1, ultimately modulating the amount of TNFR1
cc produced. The antisense compounds and method are useful as research
cc reagents and diagnostics, and in the treatment and prophylaxis of
cc infection, inflammation or tumour formation. Sequences AA248482-565
cc represent antisense oligos used for inhibition of the human TNFR1 mRNA
xx
xx Sequence 18 BP; 11 A; 3 C; 3 G; 1 T; 0 U; 0 Other;
xx
xx Query Match 24.7%; Score 18; DB 1; Length 18;
xx Best Local Similarity 100.0%; Pred. No. 58;
xx Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
xx
xx 906 CATTTCCTTTGGTCTTTG 923
xx |||||
xx 18 CATTTCCTTTGGTCTTTG 1
xx
xx RESULT 3
xx AA248532/c
xx ID AA248532 standard; DNA; 18 BP.
xx
xx AA248532;
xx
xx 31-MAR-2000 (first entry)
xx
xx Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18925.
xx
xx Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
xx inflammation; tumour formation; TNFR1; anticancer; ss.
xx
xx Synthetic.
xx Homo sapiens.
xx US6007995-A.
xx 28-DEC-1999.
xx
xx 26-JUN-1998; 98US-00106038.
xx
xx 26-JUN-1998; 98US-00106038.
xx
xx (ISIS-) ISIS PHARM INC.
xx
xx Baker BF, Cowser LM;
xx WPI; 2000-105333/09.
xx
xx Antisense inhibition of tumor necrosis factor type 1 expression for
xx diagnosis, treatment and prevention of disease, particularly tumors.
xx
xx Example 10; Col 25; 34pp; English.
xx
xx The invention provides antisense compounds targeted to human tumour
cc necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
cc can be used in a method of inhibiting the expression of TNFR1 human cells
cc or tissues. The antisense compounds specifically hybridize with one or
cc more nucleic acids encoding TNFR1 modulating the function of nucleic acid
cc molecules encoding TNFR1, ultimately modulating the amount of TNFR1
cc produced. The antisense compounds and method are useful as research
cc reagents and diagnostics, and in the treatment and prophylaxis of
cc infection, inflammation or tumour formation. Sequences AA248482-565
cc represent antisense oligos used for inhibition of the human TNFR1 mRNA
cc

```

```

XX SQ Sequence 18 BP; 9 A; 2 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 24.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 935 TCCTCTTCATTGGTTTAA 952
DB 18 TCCTCTTCATTGGTTTAA 1

RESULT 4
AAZ48529/c
ID AAZ48529 standard; DNA; 18 BP.
XX AC AAZ48529;
XX DT 31-MAR-2000 (first entry)
XX DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18922.
XX KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
XX KW inflammation; tumour formation; TNFR1; anticancer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN US6007995-A.
XX PD 28-DEC-1999.
XX PF 26-JUN-1998; 98US-00106038.
XX PR 26-JUN-1998; 98US-00106038.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowseert LM;
XX PS WPI; 2000-105333/09.
XX PT Antisense inhibition of tumor necrosis factor type 1 expression for
XX PT diagnosis, treatment and prevention of disease, particularly tumors.
XX PS Example 10; Col 25; 34pp; English.
XX CC The invention provides antisense compounds targeted to human tumour
XX CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
XX CC can be used in a method of inhibiting the expression of TNFR1 human cells
XX CC or tissues. The antisense compounds specifically hybridize with one or
XX CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
XX CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
XX CC produced. The antisense compounds and method are useful as research
XX CC reagents and diagnostics, and in the treatment and prophylaxis of
XX CC infection, inflammation or tumour formation. Sequences AAZ48482-565
XX CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX SQ Sequence 18 BP; 8 A; 1 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 24.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 929 TATCCCTCCTCTTCATTG 946
DB 18 TATCCCTCCTCTTCATTG 1

RESULT 6
AAZ48530/c
ID AAZ48530 standard; DNA; 18 BP.
XX AC AAZ48530;
XX DT 31-MAR-2000 (first entry)
XX DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18923.
XX KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
XX KW inflammation; tumour formation; TNFR1; anticancer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN US6007995-A.
XX PD 28-DEC-1999.
XX PS 28-DEC-1999.

XX SQ Sequence 18 BP; 11 A; 3 C; 4 G; 0 T; 0 U; 0 Other;
Query Match 24.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 911 TCTTTGGTCTTTGCCTTT 928
DB 18 TCTTTGGTCTTTGCCTTT 1

RESULT 5
AAZ48531/c
ID AAZ48531 standard; DNA; 18 BP.
XX AC AAZ48531;
XX DT 31-MAR-2000 (first entry)
XX DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18924.
XX KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
XX KW inflammation; tumour formation; TNFR1; anticancer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN US6007995-A.
XX PD 28-DEC-1999.
XX PS 28-DEC-1999.

```

26-JUN-1998; 98US-00106038.  
 26-JUN-1998; 98US-00106038.  
 (ISIS-) ISIS PHARM INC.  
 Baker BF, Cowser LM;  
 WPI; 2000-105333/09.  
 Antisense inhibition of tumor necrosis factor type 1 expression for diagnosis, treatment and prevention of disease, particularly tumors.  
 Example 10; Col 25; 34pp; English.  
 The invention provides antisense compounds targeted to human tumor necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds can be used in a method of inhibiting the expression of TNFR1 human cells or tissues. The antisense compounds specifically hybridize with one or more nucleic acids encoding TNFR1 modulating the function of nucleic acid molecules encoding TNFR1, ultimately modulating the amount of TNFR1 produced. The antisense compounds and method are useful as research reagents and diagnostics, and in the treatment and prophylaxis of infection, inflammation or tumor formation. Sequences AA48482-565 represent antisense oligos used for inhibition of the human TNFR1 mRNA

Sequence 18 BP; 9 A; 1 C; 7 G; 1 T; 0 U; 0 Other;  
 Query Match 24.7%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 58;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

921 TTGCCTTTTATCCCTCCT 938  
 18 TTGCCTTTTATCCCTCCT 1

RESULT 7  
 T05026/c  
 ABT05026 standard; DNA; 18 BP.  
 ABT05026;  
 11-OCT-2002 (first entry)  
 TNFR1 expression modulation related antisense oligo SEQ ID No 56.  
 Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; human; ds.  
 Homo sapiens.  
 WO200248168-A1.  
 20-JUN-2002.  
 22-OCT-2001; 2001WO-US051224.  
 24-OCT-2000; 2000US-00695451.  
 (ISIS-) ISIS PHARM INC.  
 Baker BF, Cowser LM, Zhang H, Dean NM;  
 WPI; 2002-583481/62.  
 Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
 Example 10; Page 45; 121pp; English.

CC The invention relates to an antisense compound 8 to 30 nucleotides in  
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
 CC TNFR1. The antisense compound is useful for inhibiting the expression of  
 CC TNFR1 in cells or tissues. The antisense compound is also useful for  
 CC treating an animal (preferably human) having a disease or condition  
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 CC the expression of TNFR1. The antisense compound is useful for  
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 CC This polynucleotide sequence represents a human oligonucleotide relating  
 CC to the TNFR1 of the invention  
 CC XX  
 SQ Sequence 18 BP; 9 A; 1 C; 7 G; 1 T; 0 U; 0 Other;  
 Query Match 24.7%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 58;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

921 TTGCCTTTTATCCCTCCT 938  
 18 TTGCCTTTTATCCCTCCT 1

RESULT 8  
 ABT05029/c  
 ID ABT05029 standard; DNA; 18 BP.  
 XX ABT05029;  
 AC ABT05029;  
 XX  
 DT 11-OCT-2002 (first entry)  
 XX TNFR1 expression modulation related antisense oligo SEQ ID No 59.  
 DE Antisense compound; tumour necrosis factor receptor 1; liver disease;  
 XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
 KW human; ds.  
 KW  
 XX Homo sapiens.  
 OS  
 XX WO200248168-A1.  
 PN  
 XX 20-JUN-2002.  
 PD  
 XX 22-OCT-2001; 2001WO-US051224.  
 PF  
 XX 24-OCT-2000; 2000US-00695451.  
 PR  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Baker BF, Cowser LM, Zhang H, Dean NM;  
 PI WPI; 2002-583481/62.  
 XX  
 DR Novel antisense compound targeted to nucleic acid molecule encoding tumor  
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having  
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
 XX Example 10; Page 45; 121pp; English.  
 PS  
 XX The invention relates to an antisense compound 8 to 30 nucleotides in  
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
 CC TNFR1. The antisense compound is useful for inhibiting the expression of  
 CC TNFR1 in cells or tissues. The antisense compound is also useful for  
 CC treating an animal (preferably human) having a disease or condition  
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 CC the expression of TNFR1. The antisense compound is useful for  
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 CC This polynucleotide sequence represents a human oligonucleotide relating  
 CC to the TNFR1 of the invention  
 CC XX



```
SQ Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 24.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 952 ATGTATCGCTACCAACGG 969
18 ATGTATCGCTACCAACGG 1

Db
RESULT 9
ABT05103/c
ID ABT05103 standard; DNA; 18 BP.
AC
XX
AC
XX
AC
XX
DT 11-OCT-2002 (first entry)
XX
XX
TNFR1 expression modulation related antisense oligo SEQ ID No 133.
DE
XX
Antisense compound; tumour necrosis factor receptor 1; liver disease;
TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW
KW human; ds.
XX
XX Homo sapiens.
OS
XX WO200248168-A1.
XX
XX 20-JUN-2002.
XX
XX 22-OCT-2001; 2001WO-US051224.
XX
XX 24-OCT-2000; 2000US-00695451.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Cowser LM, Zhang H, Dean NM;
XX
XX WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
necrosis factor receptor 1 (TNFR1), useful for treating humans having
disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
XX Example 18; Page 56; 121pp; English.
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
length targeted to nucleic acid molecule encoding tumour necrosis factor
receptor 1 (TNFR1), where the antisense compound inhibits expression of
TNFR1. The antisense compound is useful for inhibiting the expression of
TNFR1 in cells or tissues. The antisense compound is also useful for
treating an animal (preferably human) having a disease or condition
associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
injury) or a hyperproliferative disorder such as cancer, by inhibiting
the expression of TNFR1. The antisense compound is useful for
diagnostics, therapeutics, prophylaxis and as research reagents and kits.
XX
XX This polynucleotide sequence represents a human oligonucleotide relating
to the TNFR1 of the invention
XX
XX Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 24.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 952 ATGTATCGCTACCAACGG 969
18 ATGTATCGCTACCAACGG 1

Db
RESULT 10
ABT05091/c
ID ABT05091 standard; DNA; 18 BP.
AC
XX
AC
XX
AC
XX
DT 11-OCT-2002 (first entry)
XX
XX
TNFR1 expression modulation related antisense oligo SEQ ID No 121.
DE
XX
Antisense compound; tumour necrosis factor receptor 1; liver disease;
TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW
KW human; ds.
XX
XX Homo sapiens.
OS
XX WO200248168-A1.
XX
XX 20-JUN-2002.
XX
XX 22-OCT-2001; 2001WO-US051224.
XX
XX 24-OCT-2000; 2000US-00695451.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Cowser LM, Zhang H, Dean NM;
XX
XX WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
necrosis factor receptor 1 (TNFR1), useful for treating humans having
disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
XX Example 18; Page 56; 121pp; English.
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
length targeted to nucleic acid molecule encoding tumour necrosis factor
receptor 1 (TNFR1), where the antisense compound inhibits expression of
TNFR1. The antisense compound is useful for inhibiting the expression of
TNFR1 in cells or tissues. The antisense compound is also useful for
treating an animal (preferably human) having a disease or condition
associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
injury) or a hyperproliferative disorder such as cancer, by inhibiting
the expression of TNFR1. The antisense compound is useful for
diagnostics, therapeutics, prophylaxis and as research reagents and kits.
XX
XX This polynucleotide sequence represents a human oligonucleotide relating
to the TNFR1 of the invention
XX
XX Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 24.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 952 ATGTATCGCTACCAACGG 969
18 ATGTATCGCTACCAACGG 1

Db
RESULT 11
ABT05098/c
ID ABT05098 standard; DNA; 18 BP.
AC
XX
AC
XX
AC
XX
DT 11-OCT-2002 (first entry)
XX
XX
TNFR1 expression modulation related antisense oligo SEQ ID No 128.
DE
XX
Antisense compound; tumour necrosis factor receptor 1; liver disease;
TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW
KW human; ds.
XX
XX Homo sapiens.
OS
```

```
ID ABT05091 standard; DNA; 18 BP.
XX
AC ABT05091;
XX
DT 11-OCT-2002 (first entry)
XX
XX TNFR1 expression modulation related antisense oligo SEQ ID No 121.
DE
XX
Antisense compound; tumour necrosis factor receptor 1; liver disease;
TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW
KW human; ds.
XX
XX Homo sapiens.
OS
XX WO200248168-A1.
XX
XX 20-JUN-2002.
XX
XX 22-OCT-2001; 2001WO-US051224.
XX
XX 24-OCT-2000; 2000US-00695451.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Cowser LM, Zhang H, Dean NM;
XX
XX WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
necrosis factor receptor 1 (TNFR1), useful for treating humans having
disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
XX Example 18; Page 56; 121pp; English.
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
length targeted to nucleic acid molecule encoding tumour necrosis factor
receptor 1 (TNFR1), where the antisense compound inhibits expression of
TNFR1. The antisense compound is useful for inhibiting the expression of
TNFR1 in cells or tissues. The antisense compound is also useful for
treating an animal (preferably human) having a disease or condition
associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
injury) or a hyperproliferative disorder such as cancer, by inhibiting
the expression of TNFR1. The antisense compound is useful for
diagnostics, therapeutics, prophylaxis and as research reagents and kits.
XX
XX This polynucleotide sequence represents a human oligonucleotide relating
to the TNFR1 of the invention
XX
XX Sequence 18 BP; 10 A; 4 C; 3 G; 1 T; 0 U; 0 Other;
Query Match 24.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 903 GGTGATTTCTTTGGTCT 920
18 GGTGATTTCTTTGGTCT 1

Db
RESULT 11
ABT05098/c
ID ABT05098 standard; DNA; 18 BP.
AC
XX
AC
XX
AC
XX
DT 11-OCT-2002 (first entry)
XX
XX
TNFR1 expression modulation related antisense oligo SEQ ID No 128.
DE
XX
Antisense compound; tumour necrosis factor receptor 1; liver disease;
TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW
KW human; ds.
XX
XX Homo sapiens.
OS
```

WO200248168-A1.  
 20-JUN-2002.  
 22-OCT-2001; 2001WO-US051224.  
 24-OCT-2000; 2000US-00695451.  
 (ISIS-) ISIS PHARM INC.  
 Baker BF, Cowser LM, Zhang H, Dean NM;  
 WPI; 2002-583481/62.  
 Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
 Example 18; Page 56; 121pp; English.  
 The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention  
 Sequence 18 BP; 9 A; 0 C; 8 G; 1 T; 0 U; 0 Other;  
 Query Match 24.7%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 58;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 925 CTTTATCCCTCCTCTTC 942  
 18 CTTTATCCCTCCTCTTC 1  
 RESULT 12  
 WT05093/c  
 ABT05093 standard; DNA; 18 BP.  
 ABT05093;  
 11-OCT-2002 (first entry)  
 TNFR1 expression modulation related antisense oligo SEQ ID No 123.  
 Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; human; ds.  
 Homo sapiens.  
 WO200248168-A1.  
 20-JUN-2002.  
 22-OCT-2001; 2001WO-US051224.  
 24-OCT-2000; 2000US-00695451.  
 (ISIS-) ISIS PHARM INC.  
 Baker BF, Cowser LM, Zhang H, Dean NM;

DR WPI; 2002-583481/62.  
 XX Novel antisense compound targeted to nucleic acid molecule encoding tumor  
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having  
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
 XX Example 18; Page 56; 121pp; English.  
 XX The invention relates to an antisense compound 8 to 30 nucleotides in  
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
 CC TNFR1. The antisense compound is useful for inhibiting the expression of  
 CC TNFR1 in cells or tissues. The antisense compound is also useful for  
 CC treating an animal (preferably human) having a disease or condition  
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 CC the expression of TNFR1. The antisense compound is useful for  
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 CC This polynucleotide sequence represents a human oligonucleotide relating  
 CC to the TNFR1 of the invention  
 XX Sequence 18 BP; 11 A; 3 C; 4 G; 0 T; 0 U; 0 Other;  
 SQ Query Match 24.7%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 58;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 909 TTTCTTGTGCTCTTCCT 926  
 DB 18 TTTCTTGTGCTCTTCCT 1  
 RESULT 13  
 ABT05100/c  
 ID ABT05100 standard; DNA; 18 BP.  
 XX ABT05100;  
 AC ABT05100;  
 XX 11-OCT-2002 (first entry)  
 DT TNFR1 expression modulation related antisense oligo SEQ ID No 130.  
 DE Antisense compound; tumour necrosis factor receptor 1; liver disease;  
 XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
 KW human; ds.  
 XX Homo sapiens.  
 OS WO200248168-A1.  
 XX 20-JUN-2002.  
 PD 22-OCT-2001; 2001WO-US051224.  
 PF 24-OCT-2000; 2000US-00695451.  
 PR (ISIS-) ISIS PHARM INC.  
 XX Baker BF, Cowser LM, Zhang H, Dean NM;  
 XX WPI; 2002-583481/62.  
 XX Novel antisense compound targeted to nucleic acid molecule encoding tumor  
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having  
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
 XX Example 18; Page 56; 121pp; English.  
 XX The invention relates to an antisense compound 8 to 30 nucleotides in  
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
 CC TNFR1. The antisense compound is useful for inhibiting the expression of  
 CC TNFR1 in cells or tissues. The antisense compound is also useful for  
 CC treating an animal (preferably human) having a disease or condition  
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 CC the expression of TNFR1. The antisense compound is useful for  
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 CC This polynucleotide sequence represents a human oligonucleotide relating  
 CC to the TNFR1 of the invention

CC treating an animal (preferably human) having a disease or condition  
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 CC the expression of TNFR1. The antisense compound is useful for  
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 CC This polynucleotide sequence represents a human oligonucleotide relating  
 CC to the TNFR1 of the invention

XX SQ Sequence 18 BP; 8 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 24.7%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 58;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 931 TCCTCTCTTCATTGGT 948  
 Db 18 TCCTCTCTTCATTGGT 1

RESULT 14  
 APT05096/c  
 ID APT05096 standard; DNA; 18 BP.

XX AC APT05096;

XX DT 11-OCT-2002 (first entry)

XX TNFR1 expression modulation related antisense oligo SEQ ID No 126.

XX Antisense compound; tumour necrosis factor receptor 1; liver disease;  
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
 KW human; ds.

XX OS Homo sapiens.

XX EN WO200248168-A1.

XX PD 20-JUN-2002.

XX FF 22-OCT-2001; 2001WO-US051224.

XX PR 24-OCT-2000; 2000US-00695451.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Baker BF, Cowser LM, Zhang H, Dean NM;

XX DR WPI; 2002-583481/62.

XX Novel antisense compound targeted to nucleic acid molecule encoding tumor  
 FT necrosis factor receptor 1 (TNFR1), useful for treating humans having  
 FT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

XX Example 18; Page 56; 121pp; English.

XX The invention relates to an antisense compound 8 to 30 nucleotides in  
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
 CC TNFR1. The antisense compound is useful for inhibiting the expression of  
 CC TNFR1 in cells or tissues. The antisense compound is also useful for  
 CC treating an animal (preferably human) having a disease or condition  
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 CC the expression of TNFR1. The antisense compound is useful for  
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 CC This polynucleotide sequence represents a human oligonucleotide relating  
 CC to the TNFR1 of the invention

XX SQ Sequence 18 BP; 9 A; 1 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 24.7%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 58;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 919 CTTTGCTTTTATCCCTC 936  
 Db 18 CTTTGCTTTTATCCCTC 1

RESULT 15

ID APT05028/c

XX AC APT05028;

XX DT 11-OCT-2002 (first entry)

XX TNFR1 expression modulation related antisense oligo SEQ ID No 58.

XX Antisense compound; tumour necrosis factor receptor 1; liver disease;  
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
 KW human; ds.

XX OS Homo sapiens.

XX EN WO200248168-A1.

XX PD 20-JUN-2002.

XX PF 22-OCT-2001; 2001WO-US051224.

XX PR 24-OCT-2000; 2000US-00695451.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Baker BF, Cowser LM, Zhang H, Dean NM;

XX DR WPI; 2002-583481/62.

XX Novel antisense compound targeted to nucleic acid molecule encoding tumor  
 FT necrosis factor receptor 1 (TNFR1), useful for treating humans having  
 FT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

XX Example 10; Page 45; 121pp; English.

XX The invention relates to an antisense compound 8 to 30 nucleotides in  
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
 CC TNFR1. The antisense compound is useful for inhibiting the expression of  
 CC TNFR1 in cells or tissues. The antisense compound is also useful for  
 CC treating an animal (preferably human) having a disease or condition  
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 CC the expression of TNFR1. The antisense compound is useful for  
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 CC This polynucleotide sequence represents a human oligonucleotide relating  
 CC to the TNFR1 of the invention

XX SQ Sequence 18 BP; 9 A; 2 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 24.7%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 58;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 935 TCCTCTTCATTGGTTAA 952  
 Db 18 TCCTCTTCATTGGTTAA 1

RESULT 16

ID APT05094/c

XX AC APT05094;

XX DT 11-OCT-2002 (first entry)

```
K TNFR1 expression modulation related antisense oligo SEQ ID No 124.
E
X Antisense compound; tumour necrosis factor receptor 1; liver disease;
W TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
W human; ds.
W
X
S Homo sapiens.
X
X WO200248168-A1.
X
X 20-JUN-2002.
D
X 22-OCT-2001; 2001WO-US051224.
F
X 24-OCT-2000; 2000US-00695451.
R
X (ISIS-) ISIS PHARM INC.
A
X Baker BF, Cowsert LM, Zhang H, Dean NM;
X WPI; 2002-583481/62.
X
X Novel antisense compound targeted to nucleic acid molecule encoding tumor
I necrosis factor receptor 1 (TNFR1), useful for treating humans having
I disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
I
X Example 18; Page 56; 121pp; English.
X
X The invention relates to an antisense compound 8 to 30 nucleotides in
X length targeted to nucleic acid molecule encoding tumour necrosis factor
X receptor 1 (TNFR1), where the antisense compound inhibits expression of
X TNFR1. The antisense compound is useful for inhibiting the expression of
X TNFR1 in cells or tissues. The antisense compound is also useful for
X treating an animal (preferably human) having a disease or condition
X associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
X injury) or a hyperproliferative disorder such as cancer, by inhibiting
X the expression of TNFR1. The antisense compound is useful for
X diagnostics, therapeutics, prophylaxis and as research reagents and kits.
X This polynucleotide sequence represents a human oligonucleotide relating
X to the TNFR1 of the invention
X
X Sequence 18 BP; 10 A; 3 C; 4 G; 1 T; 0 U; 0 Other;
X
X Query Match 24.7%; Score 18; DB 1; Length 18;
X Best Local Similarity 100.0%; Pred. No. 58;
X Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
X
X 915 TGGCTCTTGGCCTTTATC 932
X 18 TGGCTCTTGGCCTTTATC 1
X
X
X
X
X RESULT 17
X T05097/c
X ABT05097 standard; DNA; 18 BP.
X
X ABT05097;
X
X 11-OCT-2002 (first entry)
X
X TNFR1 expression modulation related antisense oligo SEQ ID No 127.
X
X Antisense compound; tumour necrosis factor receptor 1; liver disease;
X TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
X human; ds.
X
X Homo sapiens.
X
X WO200248168-A1.
X
X 20-JUN-2002.
X
```

```
PF 22-OCT-2001; 2001WO-US051224.
XX
XX 24-OCT-2000; 2000US-00695451.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Cowsert LM, Zhang H, Dean NM;
XX WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
XX Example 18; Page 56; 121pp; English.
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
XX length targeted to nucleic acid molecule encoding tumour necrosis factor
XX receptor 1 (TNFR1), where the antisense compound inhibits expression of
XX TNFR1. The antisense compound is useful for inhibiting the expression of
XX TNFR1 in cells or tissues. The antisense compound is also useful for
XX treating an animal (preferably human) having a disease or condition
XX associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
XX injury) or a hyperproliferative disorder such as cancer, by inhibiting
XX the expression of TNFR1. The antisense compound is useful for
XX diagnostics, therapeutics, prophylaxis and as research reagents and kits.
XX This polynucleotide sequence represents a human oligonucleotide relating
XX to the TNFR1 of the invention
XX
XX Sequence 18 BP; 8 A; 1 C; 8 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 24.7%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 58;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 923 GCCTTTATCCCTCTCT 940
XX 18 GCCTTTATCCCTCTCT 1
XX
XX
XX
XX RESULT 18
XX ABT05024/c
XX ID ABT05024 standard; DNA; 18 BP.
XX
XX AC ABT05024;
XX
XX DT 11-OCT-2002 (first entry)
XX
XX DE TNFR1 expression modulation related antisense oligo SEQ ID No 54.
XX
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX human; ds.
XX
XX OS Homo sapiens.
XX
XX PN WO200248168-A1.
XX
XX PD 20-JUN-2002.
XX
XX PF 22-OCT-2001; 2001WO-US051224.
XX
XX PR 24-OCT-2000; 2000US-00695451.
XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX PI Baker BF, Cowsert LM, Zhang H, Dean NM;
XX WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
PT
```

XX Example 10; Page 45; 121pp; English.

XX The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention

XX Sequence 18 BP; 11 A; 3 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 24.7%; Score 18; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 58;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 906 CATTTCTTGGTCTTGG 923  
D 18 CATTTCTTGGTCTTGG 1

RESULT 19  
ABT05027/c  
ID ABT05027 standard; DNA; 18 BP.

XX AC ABT05027;

XX 11-OCT-2002 (first entry)

TNFR1 expression modulation related antisense oligo SEQ ID No 57.

Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; human; ds.

Homo sapiens.

WO200248168-A1.

20-JUN-2002.

22-OCT-2001; 2001WO-US051224.

24-OCT-2000; 2000US-00695451.

(ISIS-) ISIS PHARM INC.

Baker BF, Cowser LM, Zhang H, Dean NM;

WPI; 2002-583481/62.

Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

Example 10; Page 45; 121pp; English.

The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention

XX Sequence 18 BP; 11 A; 3 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 24.7%; Score 18; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 58;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 906 CATTTCTTGGTCTTGG 923  
D 18 CATTTCTTGGTCTTGG 1

CC This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention

XX Sequence 18 BP; 8 A; 1 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 24.7%; Score 18; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 58;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 929 TATCCCTCTTCTTCATTG 946  
D 18 TATCCCTCTTCTTCATTG 1

RESULT 20  
ABT05101/c  
ID ABT05101 standard; DNA; 18 BP.

XX AC ABT05101;

XX 11-OCT-2002 (first entry)

TNFR1 expression modulation related antisense oligo SEQ ID No 131.

Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; human; ds.

Homo sapiens.

WO200248168-A1.

20-JUN-2002.

22-OCT-2001; 2001WO-US051224.

24-OCT-2000; 2000US-00695451.

(ISIS-) ISIS PHARM INC.

Baker BF, Cowser LM, Zhang H, Dean NM;

WPI; 2002-583481/62.

Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

Example 18; Page 56; 121pp; English.

The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention

XX Sequence 18 BP; 9 A; 2 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 24.7%; Score 18; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 58;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 933 CCTCTCTTCTTCATTGTTT 950  
D 18 CCTCTCTTCTTCATTGTTT 1

```
RESULT 21
3T05102/c
) ABT05102 standard; DNA; 18 BP.
X
X ABT05102;
X
X 11-OCT-2002 (first entry)
X
X TNFR1 expression modulation related antisense oligo SEQ ID No 132.
X
X Antisense compound; tumour necrosis factor receptor 1; liver disease;
X TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
X human; ds.
X
X Homo sapiens.
X
X WO200248168-A1.
X
X 20-JUN-2002.
X
X 22-OCT-2001; 2001WO-US051224.
X
X 24-OCT-2000; 2000US-00695451.
X
X (ISIS-) ISIS PHARM INC.
X
X Baker BF, Cowse LM, Zhang H, Dean NM;
X WPI; 2002-583481/62.
X
X Novel antisense compound targeted to nucleic acid molecule encoding tumor
X necrosis factor receptor 1 (TNFR1), useful for treating humans having
X disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
X
X Example 18; Page 56; 121pp; English.
X
X The invention relates to an antisense compound 8 to 30 nucleotides in
X length targeted to nucleic acid molecule encoding tumour necrosis factor
X receptor 1 (TNFR1), where the antisense compound inhibits expression of
X TNFR1. The antisense compound is useful for inhibiting the expression of
X TNFR1 in cells or tissues. The antisense compound is also useful for
X treating an animal (preferably human) having a disease or condition
X associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
X injury) or a hyperproliferative disorder such as cancer, by inhibiting
X the expression of TNFR1. The antisense compound is useful for
X diagnostics, therapeutics, prophylaxis and as research reagents and kits.
X This polynucleotide sequence represents a human oligonucleotide relating
X to the TNFR1 of the invention
X
X Sequence 18 BP; 5 A; 2 C; 5 G; 6 T; 0 U; 0 Other;
X
X Query Match 24.7%; Score 18; DB 1; Length 18;
X Best Local Similarity 100.0%; Pred. No. 58;
X Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
X
X 950 TAATGTCGCTACCAAC 967
X 18 TAATGTCGCTACCAAC 1
X
X RESULT 22
3T05025/c
) ABT05025 standard; DNA; 18 BP.
X
X ABT05025;
X
X 11-OCT-2002 (first entry)
X
X TNFR1 expression modulation related antisense oligo SEQ ID No 55.
X
X Antisense compound; tumour necrosis factor receptor 1; liver disease;
X TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
```

```
KW human; ds.
XX
XX Homo sapiens.
XX
XX WO200248168-A1.
XX
XX 20-JUN-2002.
XX
XX 22-OCT-2001; 2001WO-US051224.
XX
XX 24-OCT-2000; 2000US-00695451.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Cowse LM, Zhang H, Dean NM;
XX WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
XX necrosis factor receptor 1 (TNFR1), useful for treating humans having
XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
XX Example 10; Page 45; 121pp; English.
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
XX length targeted to nucleic acid molecule encoding tumour necrosis factor
XX receptor 1 (TNFR1), where the antisense compound inhibits expression of
XX TNFR1. The antisense compound is useful for inhibiting the expression of
XX TNFR1 in cells or tissues. The antisense compound is also useful for
XX treating an animal (preferably human) having a disease or condition
XX associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
XX injury) or a hyperproliferative disorder such as cancer, by inhibiting
XX the expression of TNFR1. The antisense compound is useful for
XX diagnostics, therapeutics, prophylaxis and as research reagents and kits.
XX This polynucleotide sequence represents a human oligonucleotide relating
XX to the TNFR1 of the invention
XX
XX Sequence 18 BP; 11 A; 3 C; 4 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 24.7%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 58;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 911 TCTTTGGCTTTGCCCTTT 928
XX 18 TCTTTGGCTTTGCCCTTT 1
XX
XX RESULT 23
ABT05090/c
ID ABT05090 standard; DNA; 18 BP.
XX
XX ABT05090;
XX
XX 11-OCT-2002 (first entry)
XX
XX TNFR1 expression modulation related antisense oligo SEQ ID No 120.
XX
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX human; ds.
XX
XX Homo sapiens.
XX
XX WO200248168-A1.
XX
XX 20-JUN-2002.
XX
XX 22-OCT-2001; 2001WO-US051224.
XX
XX 24-OCT-2000; 2000US-00695451.
XX
XX (ISIS-) ISIS PHARM INC.
```

XX PI Baker BF, Cowsert LM, Zhang H, Dean NM;  
 XX LR WPI; 2002-583481/62.  
 XX PT Novel antisense compound targeted to nucleic acid molecule encoding tumor  
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having  
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
 XX FS Example 18; Page 56; 121pp; English.  
 XX CC The invention relates to an antisense compound 8 to 30 nucleotides in  
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
 CC TNFR1 in cells or tissues. The antisense compound is also useful for  
 CC treating an animal (preferably human) having a disease or condition  
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 CC the expression of TNFR1. The antisense compound is useful for  
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 CC This polynucleotide sequence represents a human oligonucleotide relating  
 CC to the TNFR1 of the invention  
 XX SQ Sequence 18 BP; 9 A; 3 C; 5 G; 1 T; 0 U; 0 Other;  
 Query Match 24.7%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 58;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 899 CCCTGGTCATTTCTTTG 916  
 DB 18 CCCGGTCATTTCTTTG 1  
 RESULT 24  
 ABT05099/c  
 ID ABT05099 standard; DNA; 18 BP.  
 AC ABT05099;  
 XX 11-OCT-2002 (first entry)  
 DT TNFR1 expression modulation related antisense oligo SEQ ID No 129.  
 DE Antisense compound; tumour necrosis factor receptor 1; liver disease;  
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
 KW human; ds.  
 XX Homo sapiens.  
 OS WO200248168-A1.  
 FN 20-JUN-2002.  
 PD 22-OCT-2001; 2001WO-US051224.  
 PF 24-OCT-2000; 2000US-00695451.  
 XX (ISIS-) ISIS PHARM INC.  
 PA Baker BF, Cowsert LM, Zhang H, Dean NM;  
 PI WPI; 2002-583481/62.  
 XX Novel antisense compound targeted to nucleic acid molecule encoding tumor  
 CC necrosis factor receptor 1 (TNFR1), useful for treating humans having  
 CC disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
 XX FS Example 18; Page 56; 121pp; English.  
 XX CC The invention relates to an antisense compound 8 to 30 nucleotides in  
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor

CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
 CC TNFR1 in cells or tissues. The antisense compound is also useful for  
 CC treating an animal (preferably human) having a disease or condition  
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 CC the expression of TNFR1. The antisense compound is useful for  
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 CC This polynucleotide sequence represents a human oligonucleotide relating  
 CC to the TNFR1 of the invention  
 XX SQ Sequence 18 BP; 9 A; 0 C; 7 G; 2 T; 0 U; 0 Other;  
 Query Match 24.7%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 58;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 927 TTTATCCCTCCTCTTCAT 944  
 DB 18 TTTATCCCTCCTCTTCAT 1  
 RESULT 25  
 ABT05092/c  
 ID ABT05092 standard; DNA; 18 BP.  
 AC ABT05092;  
 XX 11-OCT-2002 (first entry)  
 DT TNFR1 expression modulation related antisense oligo SEQ ID No 122.  
 DE Antisense compound; tumour necrosis factor receptor 1; liver disease;  
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
 KW human; ds.  
 XX Homo sapiens.  
 OS WO200248168-A1.  
 FN 20-JUN-2002.  
 PD 22-OCT-2001; 2001WO-US051224.  
 PF 24-OCT-2000; 2000US-00695451.  
 XX (ISIS-) ISIS PHARM INC.  
 PA Baker BF, Cowsert LM, Zhang H, Dean NM;  
 PI WPI; 2002-583481/62.  
 XX Novel antisense compound targeted to nucleic acid molecule encoding tumor  
 CC necrosis factor receptor 1 (TNFR1), useful for treating humans having  
 CC disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
 XX FS Example 18; Page 56; 121pp; English.  
 XX CC The invention relates to an antisense compound 8 to 30 nucleotides in  
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
 CC TNFR1 in cells or tissues. The antisense compound is also useful for  
 CC treating an animal (preferably human) having a disease or condition  
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 CC the expression of TNFR1. The antisense compound is useful for  
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 CC This polynucleotide sequence represents a human oligonucleotide relating  
 CC to the TNFR1 of the invention  
 XX SQ Sequence 18 BP; 12 A; 2 C; 3 G; 1 T; 0 U; 0 Other;

```
Query Match      24.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

/ 905 TCATTTCTTTGGTCCTTT 922
  18 TCATTTCTTTGGTCCTTT 1

RESULT 26
3T05095/C
  ABT05095 standard; DNA; 18 BP.
  ABT05095;
  11-OCT-2002 (first entry)
  TNFR1 expression modulation related antisense oligo SEQ ID No 125.
  Antisense compound; tumour necrosis factor receptor 1; liver disease;
  TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
  human; ds.
  Homo sapiens.
  WO200248168-A1.
  20-JUN-2002.
  22-OCT-2001; 2001WO-US051224.
  24-OCT-2000; 2000US-00695451.
  (ISIS-) ISIS PHARM INC.
  Baker BF, Cowser LM, Zhang H, Dean NM;
  WPI; 2002-583481/62.
  Novel antisense compound targeted to nucleic acid molecule encoding tumor
  necrosis factor receptor 1 (TNFR1), useful for treating humans having
  disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
  Example 18; Page 56; 121pp; English.
  The invention relates to an antisense compound 8 to 30 nucleotides in
  length targeted to nucleic acid molecule encoding tumour necrosis factor
  receptor 1 (TNFR1), where the antisense compound inhibits expression of
  TNFR1. The antisense compound is useful for inhibiting the expression of
  TNFR1 in cells or tissues. The antisense compound is also useful for
  treating an animal (preferably human) having a disease or condition
  associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
  injury) or a hyperproliferative disorder such as cancer, by inhibiting
  the expression of TNFR1. The antisense compound is useful for
  diagnostics, therapeutics, prophylaxis and as research reagents and kits.
  This polynucleotide sequence represents a human oligonucleotide relating
  to the TNFR1 of the invention
  Sequence 18 BP; 9 A; 2 C; 6 G; 1 T; 0 U; 0 Other;

Query Match      24.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

/ 917 GTCCTTGCCCTTTATCCC 934
  18 GTCCTTGCCCTTTATCCC 1

RESULT 27
3T05104/C
  ABT05104 standard; DNA; 18 BP.
  ABT05104;
  11-OCT-2002 (first entry)
  TNFR1 expression modulation related antisense oligo SEQ ID No 134.
  Antisense compound; tumour necrosis factor receptor 1; liver disease;
  TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
  human; ds.
  Homo sapiens.
  WO200248168-A1.
  20-JUN-2002.
  22-OCT-2001; 2001WO-US051224.
  24-OCT-2000; 2000US-00695451.
  (ISIS-) ISIS PHARM INC.
  Baker BF, Cowser LM, Zhang H, Dean NM;
  WPI; 2002-583481/62.
  Novel antisense compound targeted to nucleic acid molecule encoding tumor
  necrosis factor receptor 1 (TNFR1), useful for treating humans having
  disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
  Example 18; Page 56; 121pp; English.
  The invention relates to an antisense compound 8 to 30 nucleotides in
  length targeted to nucleic acid molecule encoding tumour necrosis factor
  receptor 1 (TNFR1), where the antisense compound inhibits expression of
  TNFR1. The antisense compound is useful for inhibiting the expression of
  TNFR1 in cells or tissues. The antisense compound is also useful for
  treating an animal (preferably human) having a disease or condition
  associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
  injury) or a hyperproliferative disorder such as cancer, by inhibiting
  the expression of TNFR1. The antisense compound is useful for
  diagnostics, therapeutics, prophylaxis and as research reagents and kits.
  This polynucleotide sequence represents a human oligonucleotide relating
  to the TNFR1 of the invention
  Sequence 18 BP; 4 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

Query Match      24.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 954 GTATCGCTACCAACGGTG 971
DB 18 GTATCGCTACCAACGGTG 1

RESULT 28
ABK16809
ID ABK16809 standard; DNA; 24 BP.
XX
AC ABK16809;
XX
XX 26-MAR-2002 (first entry)
XX
XX Human protein refolding PCR primer #36.
XX
XX Protein refolding; growth hormone supergene family; human; mouse; ss;
XX therapeutic half-life; PCR primer; anti-angiogenesis factor.
XX
XX Homo sapiens.
XX
XX WO200187925-A2.
XX
```



PD XX 22-NOV-2001.  
XX  
XX  
XX 16-MAY-2001; 2001WO-US016088.  
XX  
XX 16-MAY-2000; 2000US-0204617P.  
XX  
XX (BOLD-) BOLDER BIOTECHNOLOGY INC.  
XX  
XX  
XX Rosendahl MS, Cox GN, Doherty DH;  
XX  
XX WPI; 2002-089843/12.  
XX  
XX Making and refolding insoluble or aggregated proteins having free  
XX cysteine by exposing host cell expressing protein to cysteine blocking  
XX agent, and exposing to cysteine reactive group to increase their  
XX effectiveness.  
XX  
XX Example 9; Page 39; 110pp; English.  
XX  
XX The invention relates to a host cell, made to express an insoluble or  
XX aggregated protein having free cysteines residues. The cell is then lysed  
XX by chemical, enzymatic or physical agents and solubilised by exposing it  
XX to a denaturing agent, a reducing agent and a cysteine blocking agent,  
XX and is refolded into a biologically active form by reducing the  
XX concentrations of denaturing and reducing agents. The protein may belong  
XX to the growth hormone supergene family or may be an anti-angiogenesis  
XX factor. The method is useful for preparing a refolded, soluble form of an  
XX insoluble or aggregated protein. The proteins of the invention can act as  
XX delivery vehicles for enhancement of the circulatory half-life of the  
XX therapeutics that are attached or for directing delivery of a specific  
XX target within the body. Sequences ABK16774-ABK16852 represent PCR primers  
XX used in synthesis of the proteins  
XX  
XX Sequence 24 BP; 4 A; 8 C; 2 G; 10 T; 0 U; 0 Other;  
SQ  
Query Match 24.1%; Score 17.6; DB 1; Length 24;  
Best Local Similarity 83.3%; Pred. No. 84;  
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 944 TTGGTTTAAATGATGCGTACCAAC 967  
DB 1 TTCTGTTTCTCTATCGCTACCAAC 24  
RESULT 29  
ABZ30031  
ID ABZ30031 standard; DNA; 25 BP.  
AC  
XX ABZ30031;  
XX  
XX 30-JAN-2003 (first entry)  
XX  
XX Candida albicans GRACE strain PCR primer SEQ ID NO 4182.  
XX  
XX Fungus; yeast; tetracycline; promoter; GRACE strain; biosynthesis;  
XX signal transduction; DNA replication; cell division; growth;  
XX proliferation; Candida albicans; fungicide; antifungal; PCR; primer; ss.  
XX  
XX Candida albicans.  
XX  
XX WO200253728-A2.  
XX  
XX 11-JUL-2002.  
XX  
XX 26-DEC-2001; 2001WO-US049486.  
XX  
XX 29-DEC-2000; 2000US-0259128P.  
XX  
XX 20-FEB-2001; 2001US-00792024.  
XX  
XX 22-AUG-2001; 2001US-0314050P.  
XX  
XX (ELIT-) ELITRA PHARM INC.  
XX  
XX Roemer T, Jiang B, Boone C, Bussey H, Ohlsen KL;  
XX

XX  
XX WPI; 2002-566694/60.  
XX  
XX Constructing strains for identifying gene products as effective targets  
XX for therapeutic intervention, by inactivating in the strain one allele of  
XX a gene and placing other allele of the gene under conditional expression.  
XX  
XX Claim 36; SEQ ID NO 4182; 167pp + Sequence Listing; English.  
XX  
XX The invention relates to constructing (M1) a strain of diploid fungal  
XX cells in which both alleles of a gene are modified, comprising modifying  
XX one allele by insertion or replacement by a cassette having an  
XX expressible selectable marker and modifying other allele by  
XX recombination, of a promoter replacement fragment with a heterologous  
XX promoter, so that expression of the second allele is regulated by the  
XX promoter. (M1) is useful for constructing a strain of diploid fungal  
XX cells in which both alleles of a gene are modified. The diploid fungal  
XX cells having both alleles modified are useful for identifying a gene that  
XX is essential to the survival or growth of a fungus, a gene that  
XX contributes to the virulence and/or pathogenicity of a fungus, a gene  
XX that contributes to the resistance of a diploid fungus to an antifungal  
XX agent, an antifungal agent that inhibits the growth of a diploid fungus  
XX and for identifying a therapeutic agent for treatment of a mammalian  
XX disease. (M1) is useful for identifying a compound which modulates the  
XX activity of a gene product, preferably enzymatic activity, carbon  
XX compound catabolism, biosynthetic, transporter, transcriptional,  
XX translational, signal transduction, DNA replication and cell division  
XX activity. The method is useful for identifying a compound having the  
XX ability to inhibit growth or proliferation of C. albicans cells and for  
XX treating infection by C. albicans. The present sequence is that of a PCR  
XX primer used in the method of the invention. Note: The sequence data for  
XX this patent is not represented in the printed specification but is based  
XX on sequence information supplied to Derwent by the European Patent Office  
XX  
XX Sequence 25 BP; 0 A; 9 C; 2 G; 14 T; 0 U; 0 Other;  
SQ  
Query Match 23.3%; Score 17; DB 1; Length 25;  
Best Local Similarity 80.0%; Pred. No. 1.1e+02;  
Matches 20; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
QY 909 TTTCTTTGGTCTTTGCGTTTATCC 933  
DB 1 TTCTCTGCTCTTCCCTGTCTCC 25  
RESULT 30  
ABT05171/c  
ID ABT05171 standard; DNA; 20 BP.  
XX  
XX ABT05171;  
XX  
XX 11-OCT-2002 (first entry)  
XX  
XX TNFR1 expression modulation related antisense oligo SEQ ID No 201.  
XX  
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;  
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
XX mouse; murine; ds.  
XX  
XX Mus sp.  
XX  
XX WO200248168-A1.  
XX  
XX 20-JUN-2002.  
XX  
XX 22-OCT-2001; 2001WO-US051224.  
XX  
XX 24-OCT-2000; 2000US-00695451.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Baker BF, Cowser LM, Zhang H, Dean NM;  
XX

WPI; 2002-583481/62.

Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

Example 21; Page 61; 121pp; English.

The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a mouse oligonucleotide relating to the TNFR1 of the invention

Sequence 20 BP; 9 A; 3 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 21.6%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 1.5e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

914 TTGGCTTTGGCTTTATC 932

19 TAGGCTTTGGCTTTATC 1

RESULT 31

WV51522  
AAV51522 standard; DNA; 22 BP.

AAV51522;

02-FEB-1999 (first entry)

Zea mays genome forward PCR primer #122.

Polymorphic marker; allele-specific; probe; amplification; PCR primer; hybridisation; plant; hybrid certification; genetic contribution; progeny; back-cross; hybrid; ancestry; corn; ss.

Synthetic.

Zea mays.

WO9824796-A1.

11-JUN-1998.

01-DEC-1997; 97WO-US021782.

02-DEC-1996; 96US-0032069P.

07-MAR-1997; 97US-00813507.

(AFFY-) AFFYMETRIX INC.

Lemieux B, Landry BS, Sapolsky RJ, Murigneux A;

WPI; 1998-333252/29.

Brassica species allele-specific oligonucleotide probes and primers - useful for plant breeding.

Example 1; Page 52; 65pp; English.

AAV51401-V51704 are forward PCR primers used to amplify fragments of the Zea mays genome in order to detect polymorphic markers. Such markers can be used in the construction of allele-specific primers and probes for amplification or hybridisation, e.g. to determine common or disparate

CC ancestry between 2 or more plants, to monitor the genetic contribution of  
CC an ancestral plant, to trace the progeny of proprietary plants, in  
CC certification of a hybrid plant or to identify the progeny of a back-  
CC crossed plant with an ancestral plant

XX Sequence 22 BP; 2 A; 3 C; 7 G; 10 T; 0 U; 0 Other;

Query Match 21.6%; Score 15.8; DB 1; Length 22;

Best Local Similarity 89.5%; Pred. No. 1.6e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 902 TGGTCATTTCTTTGGTCT 920

Db 4 TGGTCATTTCTTTGGTGT 22

RESULT 32

AAV74507/c

ID AAX74507 standard; RNA; 17 BP.

XX

AC AAX74507;

XX 28-JUL-1999 (first entry)

DE Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #35.

XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;  
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;  
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;  
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;  
KW foetal liver kinase 1; ss.

XX Mus sp.

XX WO9715662-A2.

XX 01-MAY-1997.

XX 25-OCT-1996; 96WO-US017480.

XX 26-OCT-1995; 95US-0005974P.

PR 11-JAN-1996; 96US-00584040.

XX (RIBO-) RIBOZYME PHARM INC.

PA (CHIR) CHIRON CORP.

XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;

XX WPI; 1997-259017/23.

XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA  
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,  
PT rheumatoid arthritis, etc., in a human patient.

XX Claim 4; Page 156; 218pp; English.

XX The present invention describes nucleic acid molecules which modulate the  
CC synthesis, expression and/or stability of a mRNA encoding 1 or more  
CC receptors of vascular endothelial growth factor (VEGF). A patient  
CC (preferably human) having a condition associated with the level of the  
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing  
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour  
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be  
CC treated by administering the nucleic acid molecule or the expression  
CC vector to the patient. AAX67275 to AAX75752 represent specific examples  
CC of nucleic acid molecules from the present invention

XX Sequence 17 BP; 7 A; 2 C; 7 G; 0 T; 1 U; 0 Other;

Query Match 21.1%; Score 15.4; DB 1; Length 17;

Best Local Similarity 94.1%; Pred. No. 1.6e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 921 TTGCTTTTATCCCTCC 937  
DB 17 TTGCTTTTATCCCTCC 1

RESULT 33  
ACD50663  
ID ACD50663 standard; RNA; 17 BP.  
XX  
AC ACD50663;  
XX  
DT 23-SEP-2003 (first entry)  
XX  
DB HBV hammerhead ribozyme substrate sequence #180.

XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
KW RNA stability; RNA expression; RNA synthesis; antisense;  
KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;  
KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;  
KW HBV reverse transcriptase; Enhancer I region; viral replication;  
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
KW virucide; antiinflammatory; substrate; ss.  
XX  
OS Hepatitis B virus.  
XX  
PN WO200281494-A1.  
XX  
PD 17-OCT-2002.  
XX  
PF 26-MAR-2002; 2002WO-US009187.  
XX  
PR 26-MAR-2001; 2001US-00817879.  
PR 08-JUN-2001; 2001US-00877478.  
PR 08-JUN-2001; 2001US-0296876P.  
PR 24-OCT-2001; 2001US-0335059P.  
PR 05-DEC-2001; 2001US-0337055P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MACE/) MACEJAK D.  
PA (MCSW/) MCSWIGGEN J.  
PA (MORR/) MORRISSEY D.  
PA (PACV/) PAVCO P.  
PA (LEEP/) LEE P.  
PA (DRAP/) DRAPER K.  
PA (ROBE/) ROBERTS E.  
XX  
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
PI Draper K, Roberts E;  
XX  
DR WPI; 2003-229207/22.

XX Novel compound useful for treating cirrhosis, liver failure,  
PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
PT infection.  
XX  
XX Example 1; Page 139; 387pp; English.

XX The present invention relates to nucleic acid molecules which modulate  
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. DNazymes,  
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
CC DNA. The nucleic acids may be used to modulate the expression of HBV  
CC genes and HBV viral replication. Also disclosed is a method for screening  
CC compounds and/or potential therapies directed against HBV, and compounds  
CC that modulate the expression and/or replication of HCV. The compounds and  
CC methods of the invention are useful for the treatment of degenerative and  
CC disease states related to HBV and HCV infection, replication and gene

CC expression such as cirrhosis, liver failure, and hepatocellular  
CC carcinoma. The present sequence represents a substrate for one of the HBV  
CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberyne sequences  
CC disclosed in the present invention  
XX  
SQ Sequence 17 BP; 1 A; 2 C; 2 G; 0 T; 12 U; 0 Other;  
Query Match 21.1%; Score 15.4; DB 1; Length 17;  
Best Local Similarity 29.4%; Pred. No. 1.6e+02;  
Matches 5; Conservative 11; Mismatches 1; Indels 0; Gaps 0;  
QY 907 ATTTTCTTTGGTCTTG 923  
DB 1 AUUUUUUUUUUUUU 17

RESULT 34  
AAF56086/c  
ID AAF56086 standard; DNA; 20 BP.  
XX  
AC AAF56086;  
XX  
DT 18-APR-2001 (first entry)  
XX  
DE HBV DNA polymerase gene PCR primer HBPr135B.  
XX  
KW HBV; hepatitis B virus; DNA polymerase gene; anti-HBV drug resistance;  
KW mutation detection; PCR primer; ss.  
XX  
OS Hepatitis B virus.  
XX  
PN WO200104358-A2.  
XX  
PD 18-JAN-2001.  
XX  
PF 05-JUL-2000; 2000WO-EP006306.  
PR 08-JUL-1999; 99EP-00870148.  
PR 13-JUL-1999; 99US-0143546P.  
XX  
PA (INNO-) INNOGENETICS NV.  
PI Stuyver L, Maertens G, Van Geyt C;  
XX  
DR WPI; 2001-138370/14.

XX Monitoring anti-HBV drug resistance by genetic detection of mutations in  
PT DNA polymerase of HBV in patient's sample, involves hybridizing the  
PT polynucleic acids of the sample with a probe and detecting the hybrid.  
XX  
PS Claim 4; Page 12; 64pp; English.

XX The present sequence is a primer used in a method for monitoring anti-  
CC hepatitis B virus (HBV) drug resistance in a patient by genetic detection  
CC of any one of mutations L528M, M552V/I and/or V/L/M555I in HBV DNA  
CC polymerase in a biological sample from the patient. The method is useful  
CC in the field of genetic detection of anti-HBV drug resistance during HBV  
CC therapy. The method is rapid, reliable and precise  
XX  
SQ Sequence 20 BP; 12 A; 2 C; 4 G; 2 T; 0 U; 0 Other;  
Query Match 21.1%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 1.8e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 907 ATTTTCTTTGGTCTTG 923  
DB 17 ATTTTCTTTGGTCTTG 1

RESULT 35  
ABZ24499/c  
ID ABZ24499 standard; DNA; 23 BP.

ABZ24499;  
 21-MAR-2003 (first entry)  
 Mouse Oct 3/4 forward PCR primer.  
 Stem cell; tissue transplantation; mouse; Oct 3/4; PCR; primer; ss.  
 Mus sp.  
 WO200297065-A2.  
 05-DEC-2002.  
 31-MAY-2002; 2002WO-GB002691.  
 31-MAY-2001; 2001GB-00013118.  
 (INTE-) INTERCYTEX LTD.  
 Johnson PA, Wolowacz RG;  
 WPI; 2003-140464/13.  
 Producing mammalian stem cells from target mammalian somatic cells by introducing a medium which includes extract comprising soluble components of cytoplasm and nuclear factors of reprogramming cells, into a target cell.  
 Disclosure; Page 44; 90pp; English.  
 The present invention relates to methods of producing pluripotent mammalian stem cells by reprogramming target somatic cells by introducing into the target cell a medium which includes an extract comprising soluble components of the cytoplasm and nuclear factors or reprogramming cells, where the extract is enriched for the nuclear factors. The reprogramming cell is a germ cell, e.g. an egg cell or an embryonal carcinoma (EC) cell. The target cell is a thymocyte, peripheral blood lymphocyte, epidermal cell, buccal cavity cell, cumulus cell, bone marrow stem cell, nervous system stem cell or gut stem cell, or is obtained from established cell lines, tissues or organs of an adult mammal. Methods of inducing differentiation of a stem cell and of producing tissue from a stem cell are also provided. The stem cell can be used to produce neural, smooth muscle, striated muscle, cardiac muscle, bone, cartilage, liver, kidney, respiratory epithelium, haematopoietic cells, spleen, skin, stomach and intestine tissue. The tissue can be used to treat a condition or disease requiring transplantation of tissue. The stem cells can also be used to screen components with potential to treat disease. The present sequence is that of a forward PCR primer for mouse Oct 3/4, a gene characteristically expressed in pluripotent cells. Successful reprogramming of target somatic cells by treatment with EC cell extracts or xenopus egg extracts was assessed by determining expression of such genes using a Ragman Real-time PCR method. Oct 3/4 expression was detected in mouse EC cells but not in mouse thymocytes. The primer was gene- and species-specific  
 Sequence 23 BP; 11 A; 3 C; 7 G; 2 T; 0 U; 0 Other;  
 Query Match 20.8%; Score 15.2; DB 1; Length 23;  
 Best Local Similarity 85.0%; Pred. No. 2.1e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 920 TTTCCTTTTATCCCTCCCTC 939  
 20 TGTGCTTTTAACTCCCTCC 1  
 RESULT 36  
 ABZ68856/c  
 ABZ68856 standard; DNA; 23 BP.  
 ABZ68856;

XX 28-MAY-2003 (first entry)  
 DT Forward PCR primer for murine Oct 3/4 cDNA fragment.  
 DE Fused cell; porous filter; pluripotent cell; undifferentiated cell;  
 XX Oct 3/4; PCR; primer; ss.  
 KW Mus sp.  
 OS WO2003014337-A2.  
 XX 20-FEB-2003.  
 XX 02-AUG-2002; 2002WO-GB003570.  
 XX 03-AUG-2001; 2001GB-00018984.  
 XX (INTE-) INTERCYTEX LTD.  
 PA (ANDR/) ANDREWS P W.  
 PA (SHER/) SHERING A F.  
 PA (FLAS/) FLASZA M A.  
 XX Andrews PW, Shering AF, Flasz MA;  
 PI WPI; 2003-268198/26.  
 XX Producing a fused cell by providing a porous filter, allowing a first or  
 XX second parent cell to attach to either side of the porous filter,  
 PT respectively, and causing fusion of the cell membranes through the pores  
 PT of the porous filter.  
 XX Disclosure; Page 43; 82pp; English.  
 PS The specification describes a method for producing a fused cell. The  
 XX method comprises providing a porous filter; allowing a first parent cell  
 CC to attach to one side of the porous filter; and a second parent cell to  
 CC attach to the other side of the porous filter; and causing fusion of the  
 CC cell membranes through the pores of the porous filter so that the cell  
 CC cytoplasm are contiguous through the porous filter while the chromosomes  
 CC of the parent cells remain separated by the porous filter. The method is  
 CC useful for producing a fused cell. The method may also be used in a  
 CC method for assessing reprogramming of a target cell or may be used in  
 CC cell deprogramming where a pluripotent undifferentiated cell is fused  
 CC with a differentiated target cell to give a deprogrammed target cell with  
 CC the same genetic constituency as the original target cell. PCR primers  
 CC ABZ6886-57 and probe ABZ6886-58 were used to amplify and detect, in the  
 CC respectively, murine Oct 3/4 cDNA from fused and parent cells, in the  
 CC course of the invention  
 XX Sequence 23 BP; 11 A; 3 C; 7 G; 2 T; 0 U; 0 Other;  
 SQ Query Match 20.8%; Score 15.2; DB 1; Length 23;  
 Best Local Similarity 85.0%; Pred. No. 2.1e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 920 TTTCCTTTTATCCCTCCCTC 939  
 20 TGTGCTTTTAACTCCCTCC 1  
 Db  
 RESULT 37  
 AAV10706/c  
 ID AAV10706 standard; DNA; 19 BP.  
 XX AAV10706;  
 AC AAV10706;  
 XX 21-JUL-1998 (first entry)  
 DT Human breast cancer gene CH1-9a11-2 primer pchl-t7-5f.  
 DE Breast cancer; malignant transformation; diagnostic; therapeutic;  
 XX screening; primer; ss.  
 KW

```

XX Synthetic.
CS Homo sapiens.
XX WO9738085-A2.
XX 16-OCT-1997.
XX 09-APR-1997; 97WO-US005930.
XX 10-APR-1996; 96US-0015167P.
XX 05-JUN-1996; 96WO-US009286.
XX 06-JUN-1996; 96US-0019202P.
XX 11-JUL-1996; 96US-00678280.
XX (CALP-) CALIFORNIA PACIFIC MEDICAL CENT RES INST.
XX Smith H, Chen L;
XX WPI; 1997-512705/47.
XX Breast cancer genes - used to develop products to design or screen
XX diagnostic reagents or therapeutic compounds.
XX Disclosure; Fig 7; 118pp; English.
XX AAV10702-V10719 are primers used in a method to identify the novel human
XX breast cancer gene CHI-9a11-2 by differential display. The identified
XX genes or fragments of these genes can be used for identifying genes and
XX gene products that are intimately related to malignant transformation or
XX maintenance of the malignant properties of cancer cells. It can also be
XX used to design or screen diagnostic reagents or therapeutic compounds.
XX Kits are included within the scope of the invention
XX
XX SQ Sequence 19 BP; 7 A; 2 C; 8 G; 1 T; 0 U; 1 Other;
Query Match 20.5%; Score 15; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 2e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CY 928 TTATCCCTCCTCTTC 942
Db 18 TTATCCCTCCTCTTC 4

RESULT 38
AAV14301/c
ID AAV14301 standard; DNA; 20 BP.
AC AAV14301;
XX
XX 27-AUG-2003 (revised)
DT 19-MAY-1998 (first entry)
XX
XX Probe HBPr135 for Hepatitis b virus.
XX
XX Probe; hepatitis b virus; HBV detection; RT pol region; genetic analysis;
XX preCore region; HBsAg region; genotype specific target;
XX mutation detection; ss.
XX
XX Synthetic.
CS Hepatitis B virus.
XX
XX WO9740193-A2.
XX 30-OCT-1997.
XX
XX 21-APR-1997; 97WO-EP002002.
XX
XX 19-APR-1996; 96EP-00870053.
XX
XX (INNO-) INNOGENETICS NV.
XX

```

```

PI Stuyver L, Rossau R, Maertens G;
XX WPI; 1997-535867/49.
XX
XX Detection and/or genetic analysis of hepatitis B virus - specifically
XX PT genotype, preCore mutations, vaccine escape mutations and RT gene
XX PT mutations selected by treatment with drugs.
XX
XX Example 1; Page 29; 80pp; English.
XX
XX This sequence represents a probe for hepatitis b virus (HBV), used in the
XX method of the invention for detection and/or genetic analysis of
XX hepatitis B virus (HBV) in a sample. The method comprises: (a) optionally
XX releasing, isolating or concentrating polynucleic acids (I) in the
XX sample, and amplifying the relevant part of a suitable HBV gene in the
XX combinations of at least 2 nucleotide probes, which are applied to known
XX locations on a solid support and hybridise specifically to mutant target
XX sequences chosen from the HBV RT pol gene region, HBV preCore region,
XX HBsAg region and/or HBV genotype specific target sequences, or their
XX complements or U for T homologues; (c) detecting the hybrids formed in
XX step (b), and inferring the HBV genotype and/or mutants present in the
XX sample from the differential hybridisation signal(s). The composition can
XX be used to diagnose and/or monitor HBV mutants and/or genotypes in a
XX sample, specifically genotype, preCore mutations, vaccine escape
XX mutations and RT gene mutations selected by treatment with drugs, e.g.
XX lamivudine and penciclovir. (Updated on 27-AUG-2003 to correct OS field.)
XX
XX SQ Sequence 20 BP; 11 A; 2 C; 4 G; 2 T; 0 U; 1 Other;
Query Match 20.5%; Score 15; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 2.1e+02; Mismatches 1; Indels 0; Gaps 0;
Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

CY 907 ATTTCTTTGTGCTTTG 923
Db 17 ATTTCTTTGTGCTVGT 1

RESULT 39
AAAD09117/c
ID AAD09117 standard; DNA; 20 BP.
XX
XX AAD09117;
AC AAD09117;
XX
XX 04-SEP-2001 (first entry)
DT
XX
XX Hepatitis B virus genotype G DNA amplifying primer HBPr135.
XX
XX HBV genotype G; precore; HBpol; polymerase; envelope protein; preS1;
XX preS2; surface antigen; HBsAg; HBx protein; vaccine; liver disease;
XX hepatitis; liver cancer; HBcAg; core antigen; PCR primer; ss.
XX
XX Hepatitis B virus.
OS
XX
XX WO200138498-A2.
XX
XX 31-MAY-2001.
PD
XX
XX 21-NOV-2000; 2000WO-US032108.
PF
XX
XX 24-NOV-1999; 99US-0167206P.
PR
XX
XX (PHAR-) PHARMASSET INC.
PA (INNO-) INNOGENETICS NV.
XX
XX Stuyver L, Schinazi R, De Gendt S, Van Geyt C, Zoulim F, Fried M;
PI Rossau R;
XX
XX WPI; 2001-367676/38.
XX
XX Novel hepatitis B virus genotype G, nucleic acids encoding virus,
XX polypeptides encoded by nucleic acids, useful for preparing vaccine to
XX

```

CC treat or prevent the hepatitis B virus genotype G infection in a subject.  
CC Example; Page 39; 84pp; English.

CC The present invention relates to hepatitis B virus (HBV) strain PRL1,  
CC genotype G DNA encoding PreCore/core protein, HbPol, envelope (PreS1,  
CC PreS2 and surface antigen HBSAg) and HBx proteins. HBV genotype G nucleic  
CC acids and polypeptides are useful for diagnosing, prognosing and treating  
CC infections caused by HBV genotype G. They can be used in a vaccine to  
CC treat or prevent HBV genotype G infection. The HBV genotype G derived  
CC nucleic acids and antibodies are useful for detecting HBV genotype G in a  
CC sample or diagnosis of HBV genotype G infection. The presence of HBV  
CC genotype G statistically correlates with the presence of liver damage  
CC and/or liver cancer in the subject. The HBV genotype G core insert  
CC peptide encoding nucleic acid is useful for designing monitoring assays  
CC to study and predict the evolution of anti-HBe and anti-HBc antibodies  
CC and HBeAg (genotype G e antigen) in patients infected with HBV. The  
CC antibodies or antigens of HBV genotype G are useful for identifying a  
CC stage of liver disease caused by HBV genotype G. The present sequence is  
CC a PCR primer used to amplify hepatitis B virus (HBV) genotype G DNA  
CC fragment

CC Sequence 20 BP; 11 A; 2 C; 4 G; 2 T; 0 U; 1 Other;

Query Match 20.5%; Score 15; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 2.1e+02;  
Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

CC 907 ATTTCTTTGGCTTTG 923  
CC ||||| |||||  
CC 17 ATTTCTTTGGCTTTG 1

RESULT 40  
AAH77555/c

CC AAH77555 standard; DNA; 20 BP.

CC AAH77555;

CC 19-OCT-2001 (first entry)

CC HBV HbPol/HBSAg region antisense primer HBP 135.

CC Hepatitis B virus; HBV; preCore; Core; preS1; HBS; HBx; HBPOL;  
CC HBsAg; antiviral; vaccine; genotype G; genotyping; HbcAg; HBeAg;  
CC PCR primer; ss.

CC Hepatitis B virus.

CC WO200140279-A2.

CC 07-JUN-2001.

CC 20-NOV-2000; 2000WO-BF011526.

CC 03-DEC-1999; 99BP-00870252.

CC 07-DEC-1999; 99US-0169287P.

CC (INNO-) INNOGENETICS NV.

CC Stuyver L, Van Geyt C, De Gendt S;

CC WPI; 2001-374785/39.

CC Novel isolated and/or purified hepatitis B virus polypeptide and  
CC polynucleotide sequences that are phylogenetically different from HBV  
CC genotype A-F molecules, useful for HBV diagnosis, prophylaxis and  
CC therapy.

CC Example 1; Page 10; 94pp; English.

CC The invention relates to the complete nucleic acid sequence of a new  
CC human hepatitis B virus (HBV) genotype, provisionally named genotype G.

CC This genotype was found with a high prevalence in patients chronically  
CC infected with HBV and residing in Europe and the USA. The invention  
CC relates to a fully defined sequence of 3248 nucleotides as given in  
CC specification, a sequence with 92% identity to the given sequence, or  
CC sequence that is degenerate to the mentioned sequences. These  
CC polynucleotides are useful for HBV genotyping. The proteins encoded by  
CC the polynucleotides are useful for detecting antibodies in a biological  
CC sample. Ligands that bind to the proteins and antibodies directed against  
CC the proteins are useful for detecting the proteins and for detecting  
CC HbcAg and HBeAg (precursor proteins). They are also useful for  
CC preparing a vaccine or medicament for treating HBV infections. The  
CC present sequence is one of a number of primers used to amplify HBV DNA in  
CC examples demonstrating HBV genotyping and the detection of HBV genotype G  
CC

SQ Sequence 20 BP; 11 A; 2 C; 4 G; 2 T; 0 U; 1 Other;

Query Match 20.5%; Score 15; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 2.1e+02;  
Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

CC 907 ATTTCTTTGGCTTTG 923  
CC ||||| |||||  
CC 17 ATTTCTTTGGCTTTG 1

RESULT 41

AAH78929

ID AAH78929 standard; DNA; 23 BP.

CC AAH78929;

CC 03-FEB-1998 (first entry)

CC Human immunodeficiency virus gag gene RT-PCR primer.

CC Hepatitis B virus; HBV; detection; reverse transcriptase; RT-PCR primer;  
CC viral concentration; human immunodeficiency virus; HIV; quantitation; ss.

CC Synthetic.

CC Human immunodeficiency virus.

CC WO9717465-A1.

CC 15-MAY-1997.

CC 05-NOV-1996; 96WO-FR001736.

CC 06-NOV-1995; 95FR-00013093.

CC (MICR-) MICRODIAG.

CC Andrieu J;

CC WPI; 1997-281052/35.

CC Detection and quantitation of microorganisms by measuring nucleic acid  
CC content - relative to that in known amount of the organism processed in  
CC parallel as external standard, e.g. for quantification of viral  
CC concentration.

CC Example 2; Page 15; 63pp; French.

CC Reverse transcriptase PCR primers (AAH78928-9) were used to amplify DNA  
CC from human immunodeficiency virus (HIV), gag gene, in a new method for  
CC the quantitation and detection of a microorganism that contains RNA or  
CC DNA, using an external standard. The method comprises: use or  
CC determination of a standard concentration of microorganisms, or of DNA or  
CC RNA carried by them; and comparing the quantity of the product of reverse  
CC transcription and/or amplification of the nucleic acid produced by an  
CC unknown concentration of microorganism with the quantity of amplification  
CC product from the standard. The target microorganism, or its genome, being  
CC measured is identical to the standard, and the sample and standard are  
CC processed in parallel. The method is used to quantify microorganisms e.g.











CC The present invention relates to nucleic acid molecules which modulate  
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
 CC inozymes, zincymes, amberyemes, and G-cleaver ribozymes. Also disclosed  
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
 CC DNA. The nucleic acids may be used to modulate the expression of HBV  
 CC genes and HBV viral replication. Also disclosed is a method for screening  
 CC compounds and/or potential therapies directed against HBV, and compounds  
 CC that modulate the expression and/or replication of HCV. The compounds and  
 CC methods of the invention are useful for the treatment of degenerative and  
 CC disease states related to HBV and HCV infection, replication and gene  
 CC expression such as cirrhosis, liver failure, and hepatocellular  
 CC carcinoma. The present sequence represents a substrate for one of the HBV  
 CC ribozyme, inozyme, G-cleaver, zincyme, DNazyme or amberyeme sequences  
 CC disclosed in the present invention  
 XX  
 SQ Sequence 17 BP; 0 A; 2 C; 3 G; 0 T; 12 U; 0 Other;

Query Match 19.7%; Score 14.4; DB 1; Length 17;  
 Best Local Similarity 25.0%; Pred. No. 2.3e+02;  
 Matches 4; Conservative 11; Mismatches 1; Indels 0; Gaps 0;

Qy 908 TTTTCTTTGGCTTTG 923  
 ::::|:::|:::|:::|  
 Db 1 UUUUUUUUGUCUUUG 16

RESULT 50  
 AAV22562/c  
 ID AAV22562 standard; DNA; 20 BP.

XX AAV22562;  
 XX  
 XX 08-JUL-1998 (first entry)  
 XX  
 XX Antisense oligonucleotide designed to target the R1 message.

XX R1 subunit; ribonucleotide reductase; cell proliferation; tumour cell;  
 KW antisense; growth; inhibition; sensitivity; hydroxyurea;  
 KW chemotherapeutic drug; methotrexate; PALA; treatment; ss.

XX Synthetic.  
 CS Homo sapiens.  
 XX  
 XX WO9805769-A2.

XX 12-FEB-1998.

XX 01-AUG-1997; 97WO-CA000540.

XX 02-AUG-1996; 96US-0023040P.

XX 07-MAR-1997; 97US-0039959P.

XX (GENE-) GENESENSE TECHNOLOGIES INC.

XX Wright JA, Young AH;

XX WPT; 1998-145609/13.

XX Antisense oligonucleotides to ribonucleotide reductase genes - used to  
 PT modulate tumour growth and inhibit tumour cell proliferation.

XX Claim 8; Page 48; 79pp; English.

XX AAV22531-89 represent antisense oligonucleotides which are targeted  
 CC against the mRNA of the R1 subunit sequence of ribonucleotide reductase.  
 CC Aberrant expression of the R2 gene, which encodes the second subunit of  
 CC the ribonucleotide reductase gene, can determine the malignant  
 CC characteristics of cells. Suppression of R2 and R1 gene expression was  
 CC found to reduce transformed properties of tumour cells. The antisense

CC oligonucleotides can be used for modulating tumour cell growth, or for  
 CC inhibiting tumour cell proliferation. They can also be used for  
 CC increasing the sensitivity of neoplastic cells to chemotherapeutic drugs  
 CC (especially to hydroxyurea, methotrexate (MTX), and PALA). The antisense  
 CC oligonucleotides may be used to treat proliferative disorders including  
 CC leukemias, lymphomas, sarcomas, melanomas, various other forms of  
 CC cancer, papillomas, arthrosclerosis, psoriasis, polythemia, mastocytosis,  
 CC autoimmune diseases, angiogenesis, bacterial infections and viral  
 CC infections (including HIV hepatitis, or herpes infections)  
 XX  
 SQ Sequence 20 BP; 12 A; 3 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 19.7%; Score 14.4; DB 1; Length 20;  
 Best Local Similarity 93.8%; Pred. No. 2.6e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 908 TTTTCTTTGGCTTTG 923  
 ::::|:::|:::|:::|  
 Db 18 TTTTCTTTGCTTTG 3

RESULT 51  
 AAA90791/c  
 ID AAA90791 standard; DNA; 20 BP.

XX AAA90791;

XX 20-DEC-2000 (first entry)

XX Ribonucleotide reductase R1 message antisense oligo AS-I-1162-20.

XX Antisense oligonucleotide; ribonucleotide reductase; R1 protein;

XX R2 protein; tumour cell proliferation inhibition; cancer; cytostatic; ss.

XX Synthetic.

XX WO200047733-A1.

XX 17-AUG-2000.

XX 09-FEB-2000; 2000WO-CA000120.

XX 11-FEB-1999; 99US-00249730.

XX (GENE-) GENESENSE TECHNOLOGIES INC.

XX Wright JA, Young AH;

XX WPT; 2000-558216/51.

XX New antisense oligonucleotide, AS-I-618-20, is useful for inhibiting  
 PT tumour cell growth.

XX Example 3; Page 31; 137pp; English.

XX The present sequence is an antisense oligonucleotide directed against the  
 CC mRNA encoding the R1 component of mammalian ribonucleotide reductase.  
 CC Ribonucleotide reductase catalyses the conversion of ribonucleotides to  
 CC their corresponding deoxyribonucleotides and thus plays an important role  
 CC in DNA synthesis and cell proliferation. Regulation of ribonucleotide  
 CC reductase is altered in cultured malignant cells and increased levels of  
 CC R2 protein and R2 mRNA have been found in pre-malignant and malignant  
 CC tissues as compared to normal control tissue samples. The present  
 CC antisense sequence is therefore useful for inhibiting tumourigenicity of  
 CC neoplastic cells and inhibiting metastasis of tumour cells. It is also  
 CC useful for increasing sensitivity of neoplastic cells to chemotherapeutic  
 CC drugs, thus allowing chemotherapeutic treatments to be used in patients  
 CC who have become resistant or less sensitive to chemotherapy. The sequence  
 CC may be RNA or DNA and may comprise a modified backbone and/or nucleotide  
 CC analogues

XX Sequence 20 BP; 12 A; 3 C; 4 G; 1 T; 0 U; 0 Other;

```

Query Match          19.7%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 2.6e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

/ 908 TTTTCTTGGTCTTTG 923
  ||||| ||||| |||||
  18 TTTTCTTGGTCTTTG 3

RESULT 52
AAV51523
  AAV51523 standard; DNA; 22 BP.
  AAV51523;
  02-FEB-1999 (first entry)
  Zea mays genome forward PCR primer #123.
  Polymorphic marker; allele-specific; probe; amplification; PCR primer;
  hybridisation; plant; hybrid certification; genetic contribution;
  progeny; back-cross; hybrid; ancestry; corn; ss.
  Synthetic.
  Zea mays.
  WO9824796-A1.
  11-JUN-1998.
  01-DEC-1997; 97WO-US021782.
  02-DEC-1996; 96US-0032069P.
  07-MAR-1997; 97US-00813507.
  (AFY-) AFFYMETRIX INC.
  Lemieux B, Landry BS, Sapolsky RJ, Murrigneux A;
  WPI; 1998-333252/29.
  Brassica species allele-specific oligonucleotide probes and primers -
  useful for plant breeding.
  Example 1; Page 52; 65pp; English.
  AAV51401-V51704 are forward PCR primers used to amplify fragments of the
  Zea mays genome in order to detect polymorphic markers. Such markers can
  be used in the construction of allele-specific primers and probes for
  amplification or hybridisation, e.g. to determine common or disparate
  ancestry between 2 or more plants, to monitor the genetic contribution of
  an ancestral plant, to trace the progeny of proprietary plants, in
  certification of a hybrid plant or to identify the progeny of a back-
  crossed plant with an ancestral plant
  Sequence 22 BP; 4 A; 3 C; 7 G; 8 T; 0 U; 0 Other;

Query Match          19.7%; Score 14.4; DB 1; Length 22;
Best Local Similarity 93.8%; Pred. No. 2.8e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

  903 GGTCTTTCTTTGGT 918
    ||||| ||||| |||||
    6 GGTCTTTCTTTGGT 21

RESULT 53
AAI6173/c
  AAD16173 standard; DNA; 19 BP.
  AAD16173;
  19-NOV-2001 (first entry)

```

```

XX Bacterial cell identifying PCR lower primer #1.
DE Cell isolation; bacterial cell; non-specific ligand; eukaryotic parasite;
XX PCR primer; ss.
KW Bacteria.
XX WO200153525-A2.
XX 26-JUL-2001.
XX 22-JAN-2001; 2001WO-GB000240.
XX 21-JAN-2000; 2000GB-00001450.
XX (GENP-) GENPOINT AS.
XX (GARD/) GARDNER R.
XX Refsath UH, Kolpus T;
XX WPI; 2001-541431/60.
XX Isolating cells from a sample, particularly bacterial cell, comprises
XX binding the cells to a solid support by means of a non-specific ligand
XX immobilized on the solid support.
XX Example 2; Page 29; 77pp; English.
XX The present invention relates to a method for isolating cells from a
XX sample comprising binding the cells to a solid support using a non-
XX specific ligand immobilised on the solid support. The method is useful
XX for isolating a wide variety of microorganisms, specifically bacteria, in
XX a sample. The method may also be used in the isolation of eukaryotic
XX parasites, particularly those which are able to bind the complex
XX polysaccharides found on human cell, to isolate simultaneously bacteria
XX and other types of microorganism, such as algae, protozoa, fungi or
XX viruses, or to capture all types of white blood cells from a blood or
XX blood derived sample, from bone marrow or any tissue or fluid containing
XX white blood cells. The present sequence is a PCR primer which is used for
XX identification of isolated bacteria
XX Sequence 19 BP; 8 A; 5 C; 4 G; 2 T; 0 U; 0 Other;

Query Match          19.5%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 2.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 937 CTCCTTCATGGTTTAATGT 955
  ||||| ||||| |||||
  19 CTCCTTCATGGTTTAATGT 1

RESULT 54
AAV11921/c
  AAV11921 standard; DNA; 20 BP.
  AC AAV11921;
  XX 13-AUG-1998 (first entry)
  XX Hepatocyte growth factor inhibiting oligonucleotide #13.
  XX Hepatocyte growth factor; HGF; c-Met; modulator; inhibitor;
  KW antitumour agent; anti-metastasis agent; primer; ss.
  XX Synthetic.
  OS
  XX JP10127286-A.
  XX 19-MAY-1998.
  XX 01-NOV-1996; 96JP-00291499.

```

XX 01-NOV-1996; 96JP-00291499.  
XX (TERU ) TERUMO CORP.  
XX WPI; 1998-340665/30.  
XX Oligo:nucleotide inhibiting HGF production - useful as antitumour and  
FT anti-metastatic agent.  
XX Claim 8; Page 10; 15pp; Japanese.  
XX AAV11909-V11925, AAV11927 and AAV11928 are oligonucleotide primers used  
CC to identify sequences which modulate or inhibit expression, production or  
CC reception of hepatocyte growth factor (HGF) or expression of c-Met. Such  
CC oligonucleotides are useful as antitumour or anti-metastasis agents  
XX Sequence 20 BP; 9 A; 0 C; 11 G; 0 T; 0 U; 0 Other;  
SQ  
Query Match 19.5%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 2.8e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Cyt 924 CCTTTTATCCCTCCCTTC 942  
Dbb 19 CCTTTTCTCCTTCCCTTC 1  
RESULT 55  
AAV11923  
ID AAV11923 standard; DNA; 20 BP.  
AC AAV11923;  
XX 13-AUG-1998 (first entry)  
XX Hepatocyte growth factor inhibiting oligonucleotide #15.  
XX Hepatocyte growth factor; HGF; c-Met; modulator; inhibitor;  
KW antitumour agent; anti-metastasis agent; primer; ss.  
XX Synthetic.  
XX JP10127286-A.  
XX 19-MAY-1998.  
XX 01-NOV-1996; 96JP-00291499.  
XX 01-NOV-1996; 96JP-00291499.  
XX (TERU ) TERUMO CORP.  
XX WPI; 1998-340665/30.  
XX Oligo:nucleotide inhibiting HGF production - useful as antitumour and  
FT anti-metastatic agent.  
XX Claim 8; Page 10; 15pp; Japanese.  
XX AAV11909-V11925, AAV11927 and AAV11928 are oligonucleotide primers used  
CC to identify sequences which modulate or inhibit expression, production or  
CC reception of hepatocyte growth factor (HGF) or expression of c-Met. Such  
CC oligonucleotides are useful as antitumour or anti-metastasis agents  
XX Sequence 20 BP; 0 A; 11 C; 0 G; 9 T; 0 U; 0 Other;  
SQ  
Query Match 19.5%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 2.8e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Cyt 924 CCTTTTATCCCTCCCTTC 942  
Dbb 19 CCTTTTCTCCTTCCCTTC 1

Db 2 CCTTTTCTCCTTCCCTTC 20  
RESULT 56  
AAD37207  
ID AAD37207 standard; DNA; 20 BP.  
XX AAD37207;  
AC AAD37207;  
XX 21-AUG-2002 (first entry)  
XX Human MEKK4 antisense oligonucleotide, ISIS #123142.  
XX Human; MEKK4 modulation; mitogen-activated protein kinase 4; MTX1;  
KW MAP3K4; MAP three kinase 1; MAP/ERK kinase 4; MAPKK4; cytostatic;  
KW prophylaxis; immunological; hyperproliferative disorder; cancer; therapy;  
KW antisense; inflammatory; phosphorothioate backbone; ss.  
XX Homo sapiens.  
OS Synthetic.  
XX Key Location/Qualifiers  
FH modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone"  
FT modified\_base 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl nucleotides"  
FT modified\_base 10  
FT /\*tag= d  
FT /mod\_base= m5c  
FT modified\_base 11  
FT /\*tag= e  
FT /mod\_base= m5c  
FT modified\_base 13  
FT /\*tag= f  
FT /mod\_base= m5c  
FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT modified\_base 18  
FT /note= "2'-methoxyethyl nucleotides"  
FT /\*tag= g  
FT /mod\_base= m5c  
FT modified\_base 19  
FT /\*tag= h  
FT /mod\_base= m5c  
XX WO200227033-A1.  
XX 04-APR-2002.  
XX 28-SEP-2001; 2001WO-US030549.  
XX 29-SEP-2000; 2000US-00676436.  
XX (ISIS-) ISIS PHARM INC.  
XX Ward DT, Gaarde WA, Monia BP, Wyatt JR;  
XX WPI; 2002-416486/44.  
XX New antisense compound targeted to nucleic acid encoding mitogen-  
PT activated protein kinase 4, useful for treating immunologic disorder,  
PT inflammatory disorder or cancer.  
XX Claim 3; Page 93; 132pp; English.  
XX The present invention relates to antisense compounds, compositions and  
CC methods for modulating the expression of MEKK4 (also referred as mitogen-  
activated protein kinase 4; MAP3K4; MAP three kinase 1; MAP/ERK

kinase kinase 4; MAPKKK4; MTK1). The antisense oligos are useful for inhibiting the expression of MEKK4 in cells or tissues. They are also useful for treating an animal having a disease or condition associated with MEKK4 such as immunological, inflammatory, hyperproliferative disorder or cancer. Sequences of the invention are also useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. They are also useful in antisense therapy. The present sequence is an antisense oligonucleotide targeted to human MEKK4 DNA. This sequence is used in the exemplification of the invention

Sequence 20 BP; 2 A; 5 C; 2 G; 11 T; 0 U; 0 Other;

Query Match 19.5%; Score 14.2; DB 1; Length 20;

Best Local Similarity 84.2%; Pred. No. 2.8e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

907 ATTTCCTTGGTCTTGGCC 925

1 ATTTCCTTGGTCTTGGCC 19

RESULT 57

AS97999/c

AAS97999 standard; DNA; 21 BP.

AAS97999;

12-MAR-2002 (first entry)

Murine SAC1 gene-specific oligonucleotide PCR primer #552.

Human; mouse; SAC1; carbohydrate; sweetener; ethanol; alcoholism; ss; obesity; diabetes; transgenic embryo; body tissue; body fluid; pancreas; blood; tongue; PCR primer; anorectic; antidiabetic; gene therapy; protein replacement therapy.

Mus sp.

WO200183749-A2.

08-NOV-2001.

25-APR-2001; 2001WO-US013387.

28-APR-2000; 2000US-0200794P.

28-JUL-2000; 2000US-0221419P.

10-NOV-2000; 2000US-0247443P.

(WARN ) WARNER LAMBERT CO.

(MONE-) MONELL CHEM SENSES CENT.

Bachmanov AA, Beauchamp GK, Chatterjee A, De Jong PJ, Li S, Li X;

Ohmen JD, Reed DR, Ross D, Tordoff MG;

WPI; 2002-075162/10.

Novel isolated polypeptide comprising variant form of mouse or human SAC1

polypeptide, and is associated with altered preference for carbohydrates

or other sweeteners, useful for preventing obesity, diabetes, alcoholism.

Claim 14; Page 95; 239pp; English.

The invention relates to an isolated polypeptide, comprising a variant

form of mouse or human SAC1 polypeptide. The variant form is associated

with altered preference for carbohydrates, other sweeteners or ethanol.

The polypeptide and its associated DNA sequence can be produced by

recombinant techniques and is useful for preventing obesity, diabetes or

alcoholism associated with SAC1 expression. The sequences are useful in

screening for drugs and sweeteners. Recombinant cell lines and transgenic

embryos may be used in screening for and identifying agents that induce

or repress function of SAC1. Predisposition to diabetes, obesity or

alcoholism can be ascertained by testing any fluid or tissue of a human

(such as blood, pancreas or tongue) for sequence variations of the SAC1

gene. A sequence variation of the SAC1 locus may indicate a predisposition to diabetes, obesity and/or alcoholism and may provide a diagnostic mark. The polynucleotide can be detected in a biological sample by contacting the DNA with a probe to form a hybridisation complex which is then detected. The sequences represent cDNA encoding human and mouse SAC1 polypeptides and PCR primers specific for the SAC1 genes

Sequence 21 BP; 11 A; 0 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 19.5%; Score 14.2; DB 1; Length 21;

Best Local Similarity 84.2%; Pred. No. 2.9e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

927 TTTATCCCTCCCTTCATT 945

19 TTTCCTCATCCTTCCTT 1

RESULT 58

ABK89166

ABK89166 standard; DNA; 20 BP.

ABK89166;

21-OCT-2002 (first entry)

Human JAZF1 PCR primer 7SenseInner.

Human; JAZF1; juxtaposed with another zinc finger; JAZF1; JAZF1/JAZF1;

Joined with JAZF1; proliferation; endometrial stroma tumour; immunogen;

antigen; antibody; fertility; pregnancy; gene therapy; vaccine; PCR;

primer; ss.

Homo sapiens.

WO200193805-A2.

13-DEC-2001.

04-JUN-2001; 2001WO-US017936.

02-JUN-2000; 2000US-0209093P.

(BGHM ) BRIGHAM & WOMENS HOSPITAL INC.

Koontz J, Sklar J;

WPI; 2002-575047/61.

Novel JAZF1, JAZF1 or JAZF1/JAZF1 polypeptides useful as immunogens or

antigens to raise or test anti-JAZF1, JAZF1 or JAZF1/JAZF1 antibodies.

Example 8; Page 58; 76pp; English.

The present invention relates to a new JAZF1 (juxtaposed with another

zinc finger), JAZF1 (joined with JAZF1) or JAZF1/JAZF1 polypeptide. The

methods of the invention can be used to identify a compound which

controls proliferation of endometrial stroma, by expressing JAZF1 in the

presence of the compound, and determining whether the compound affects

expression of JAZF1, JAZF1 or JAZF1/JAZF1 polypeptides are useful

as immunogens or antigens to raise or test anti-JAZF1, JAZF1 or

JAZF1/JAZF1 antibodies. The invention can be used as bait proteins in a

two hybrid assay or three hybrid assay to identify other proteins which

bind or interact with JAZF1/JAZF1-binding proteins. JAZF1, JAZF1 or

JAZF1/JAZF1 molecules are useful for identifying the origin of tumour and

as tumour marker protein to verify that a stromal tumour is from

endometrium. The antibody is useful for promoting or decreasing fertility

or pregnancy, and also for treating endometrial stromal tumours. The

present nucleic acid sequence represents a PCR primer that was used in

the methods of the invention for amplification of the human JAZF1 gene

located on chromosome 7

Sequence 20 BP; 3 A; 10 C; 0 G; 7 T; 0 U; 0 Other;

```
XX Query Match 19.2%; Score 14; DB 1; Length 20;
KW Best Local Similarity 100.0%; Pred. No. 3e+02;
KW Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 932 CCTCTCTTTCATT 945
XX |||||
XX 7 CCTCTCTTTCATT 20
XX
XX RESULT 59
XX AAF56085/c
XX ID AAF56085 standard; DNA; 20 BP.
XX
XX AC AAF56085;
XX
XX DT 18-APR-2001 (first entry)
XX
XX DE HBV DNA polymerase gene PCR primer HBPr135A.
XX
XX KW HBV; hepatitis B virus; DNA polymerase gene; anti-HBV drug resistance;
KW mutation detection; PCR primer; ss.
XX
XX OS Hepatitis B virus.
XX
XX EN WO200104358-A2.
XX
XX ED 18-JAN-2001.
XX
XX EF 05-JUL-2000; 2000WO-EP006306.
XX
XX ER 08-JUL-1999; 99EP-00870148.
XX
XX ER 13-JUL-1999; 99US-0143546P.
XX
XX PA (INNO-) INNOGENETICS NV.
XX
XX PI Stuyver L, Maertens G, Van Geyt C;
XX
XX DR WPI; 2001-138370/14.
XX
XX
XX PT Monitoring anti-HBV drug resistance by genetic detection of mutations in
PT DNA polymerase of HBV in patient's sample, involves hybridizing the
PT polynucleic acids of the sample with a probe and detecting the hybrid.
XX
XX ES Claim 4; Page 12; 64pp; English.
XX
XX CC The present sequence is a primer used in a method for monitoring anti-
XX hepatitis B virus (HBV) drug resistance in a patient by genetic detection
XX of any one of mutations L528M, M552V/I and/or V/L/M551I in HBV DNA
XX polymerase in a biological sample from the patient. The method is useful
XX in the field of genetic detection of anti-HBV drug resistance during HBV
XX therapy. The method is rapid, reliable and precise
XX
XX SQ Sequence 20 BP; 11 A; 2 C; 5 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 18.9%; Score 13.8; DB 1; Length 20;
XX Best Local Similarity 88.2%; Pred. No. 3.3e+02;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 907 ATTTTCTTTTGGCTTTG 923
XX |||||
XX 17 ATTTTCTTTTGGCTCTG 1
XX
XX RESULT 60
XX ADD89934
XX ID ADD89934 standard; DNA; 20 BP.
XX
XX AC ADD89934;
XX
XX DT 29-JAN-2004 (first entry)
XX
XX DE Murine GABA transporter 4 (GAT4) forward PCR primer.
```

```
XX
KW Ecstasy; 3,4-methylenedioxymethamphetamine; MDMA; nootropic;
KW neuroprotective; neuroleptic; mouse; gene therapy; GABA transporter 4;
KW GAT4; PCR; primer; ss.
XX
XX OS Mus sp.
XX
XX EN WO2003077831-A2.
XX
XX PD 25-SEP-2003.
XX
XX PF 13-MAR-2003; 2003WO-IL000214.
XX
XX PR 18-MAR-2002; 2002US-0364603P.
XX
XX PA (YEDA ) YEDA RES & DEV CO LTD.
XX
XX PI Simantov R, Peng W;
XX
XX DR WPI; 2003-788190/74.
XX
XX PT Use of a gamma-amino butyric acid reuptake inhibitor for treating
XX symptoms e.g. hallucination and memory loss associated with ingestion of
XX methylenedioxymethamphetamine or related psychoactive drugs.
XX
XX PS Example 1; Page 28; 28pp; English.
XX
XX CC The present sequence is that of a forward primer for the murine gamma-
XX aminobutyric acid (GABA) transporter 4 (GAT4). Use with a reverse primer
XX ADD89935 generates a 214 bp cDNA product. RT-PCR was used to identify
XX genes in the murine brain that are differentially expressed upon
XX treatment with 3,4-methylenedioxymethamphetamine (MDMA or Ecstasy). The
XX invention is based on the discovery that administration of MDMA up-
XX regulates the expression of various GABA transporter genes, especially
XX GAT1 and GAT4, within the brain. Differential display PCR showed
XX induction of GAT1 and GAT4 mRNA and protein levels following MDMA
XX associated with MDMA or related drugs, including psychostimulation,
XX hallucination, memory loss, long-lasting changes in behaviour, acute
XX toxicity and hyperthermia, by administering an agent which inhibits GABA
XX uptake or a nucleic acid molecule capable of reducing the expression of
XX GABA transporter in the brain, such as an antisense molecule or a double-
XX stranded RNA. Note: The present sequence is identified as SEQ ID 16 on
XX page 28 of the specification, but as Seq ID 18 in the sequence listing.
XX
XX SQ Sequence 20 BP; 0 A; 7 C; 2 G; 11 T; 0 U; 0 Other;
XX
XX Query Match 18.9%; Score 13.8; DB 1; Length 20;
XX Best Local Similarity 88.2%; Pred. No. 3.3e+02;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 913 TTTGGTCTTTGCCCTTTT 929
XX |||||
XX 1 TTTGGTCTTTGCCCTTTT 17
XX
XX Db
XX
XX RESULT 61
XX AAX05983
XX ID AAX05983 standard; DNA; 20 BP.
XX
XX AC AAX05983;
XX
XX DT 10-MAY-1999 (first entry)
XX
XX DE Human MAPK kinase MKK7 primer.
XX
XX KW Mitogen-activated protein kinase; MAPK kinase; MAPK; MKK7; SAPK/JNK;
KW stress activated protein kinase; c-Jun N-terminal kinase; SAPK; JNK;
KW Fas antigen; graft-versus-host disease; toxic epidermal necrolysis;
KW lupus; IGA kidney disease; gene therapy; p38; TNF-alpha; PCR primer; ss.
XX
XX OS Synthetic.
XX
XX OS Homo sapiens.
```

```

1 WO9901559-A1.
2
3 14-JAN-1999.
4
5 03-JUL-1998; 98WO-JP003016.
6
7 03-JUL-1997; 97JP-00193207.
8
9 (ASAH ) ASahi KASEI KOGYO KK.
10
11 Nishida E, Moriguchi T, Matsuzaki O;
12 WPI; 1999-106059/09.
13
14 New mitogen activated protein kinase of vertebrate origin -
15 activates SAPK/JNK (but not p38) stimulation in response to Fas antigen
16 or TNF-alpha, used in, e.g. gene therapy.
17
18 Example 2; Page 35; 92pp; Japanese.
19
20 The invention relates to a novel mitogen-activated protein kinase (MAPK)
21 kinase, designated MKK7 of vertebrate origin and widely expressed in
22 tissues. The invention provides nucleic acid sequences encoding human and
23 mouse MKK7. MKK7 activates SAPK/JNK (stress activated protein kinase /c-
24 Jun N-terminal kinase) in response to stimulation by Fas antigen or TNF-
25 alpha but does not activate p38. Host cells transformed with expression
26 vectors comprising the MKK7 nucleic acids are used for the recombinant
27 production of the proteins. The products may be used for screening of
28 candidate inhibitors or promoters of the MAPK kinase cascade useful for
29 treatment of diseases (such as graft-versus-host disease, toxic epidermal
30 necrolysis, lupus and IGA kidney disease) in which abnormal activation or
31 deactivation of this cascade is involved. The products may also be useful
32 for production of diagnostic reagents for these diseases as well as gene
33 therapy
34
35 Sequence 20 BP; 1 A; 5 C; 4 G; 10 T; 0 U; 0 Other;
36
37 Query Match 18.6%; Score 13.6; DB 1; Length 20;
38 Best Local Similarity 80.0%; Pred. No. 3.5e+02;
39 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
40
41 913 TTGGCTCTTGCCTTTATC 932
42 ||||| |||||
43 1 TTGGCTCTCTCTGGATC 20
44
45 RESULT 62
46 X95277
47 AAX95277 standard; DNA; 20 BP.
48
49 AAX95277;
50
51 13-SEP-1999 (first entry)
52
53 PCR primer used to amplify an ORF of Chlamydia pneumoniae.
54
55 Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
56 sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
57 neutralising epitope; PCR primer; ss.
58
59 Synthetic.
60 Chlamydia pneumoniae.
61
62 WO9927105-A2.
63
64 03-JUN-1999.
65
66 20-NOV-1998; 98WO-IB001890.
67
68 21-NOV-1997; 97FR-00014673.
69
70 04-NOV-1998; 98US-0107078P.

```

```

PA (GEST ) GENSET.
XX Griffais R;
XX WPI; 1999-357842/30.
XX
XX Genome sequence of Chlamydia pneumoniae.
XX
XX Page 1735; Disclosure; 1912pp; English.
XX
XX AAX91991-X97517 represent PCR primers used to amplify open reading frames
XX and other nucleic acid sequences from the genome of Chlamydia pneumoniae
XX (see AAX91990). C. pneumoniae causes respiratory disease such as
XX pneumonia and bronchitis and is thought to be a contributing factor in
XX heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
XX nodosum or pharyngitis. The polypeptides encoded by the open reading
XX frames of the C. pneumoniae genome (see AAY34584 - AAY35879) can be used
XX in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
XX nucleotide sequences can also be used as immunogenic compositions,
XX especially where the vector directs the expression of a neutralising
XX epitope of C. pneumoniae
XX
XX Sequence 20 BP; 2 A; 5 C; 5 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 18.6%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 3.5e+02;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX 936 CCTCTTCATTGCTTTAAGT 955
XX ||||| |||||
XX 1 CCTCGTCTCTGGATTGATG 20
XX
XX RESULT 63
XX AAS10302
XX ID AAS10302 standard; DNA; 20 BP.
XX
XX AAS10302;
XX
XX 24-OCT-2001 (first entry)
XX
XX Antisense oligonucleotide for human integrin alpha 4, ISIS 107254.
XX
XX Integrin alpha 4; antisense; very late antigen 4; VLA4;
XX autoimmune disease; inflammatory disease; rheumatoid arthritis;
XX multiple sclerosis; tumour metastasis; melanoma; asthma; psoriasis;
XX allergy; Grave's disease; Hashimoto's thyroiditis; oligonucleotide;
XX systemic lupus erythematosus; allograft rejection; ISIS 107254; ss.
XX
XX Homo sapiens.
XX OS
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
XX /mod_base= OTHER
XX /note= "Other= Phosphorothioate backbone"
XX
XX modified_base 1..20
XX /tag= b
XX /mod_base= OTHER
XX /note= "Other= All cytosines are 5-methyl cytosines"
XX
XX modified_base 1..3
XX /tag= c
XX /mod_base= OTHER
XX /note= "Other= 2' methoxyethoxy residues"
XX
XX modified_base 4..12
XX /tag= d
XX /mod_base= OTHER
XX /note= "Other= 2' deoxy residues"
XX
XX modified_base 13..20
XX /tag= e
XX /mod_base= OTHER
XX /note= "Other= 2' methoxyethoxy residues"

```



```

XX US6258790-B1.
PA
XX
XX 10-JUL-2001.
XX
XX 19-AUG-1999; 99US-00377309.
XX
XX 05-OCT-1998; 98US-00166203.
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX Bennett CF, Condon TP, Cowsert LM;
XX WPI; 2001-450381/48.
XX
XX Composition for treating inflammatory and autoimmune diseases, comprises
XX antisense compound targeted to nucleic acid molecule encoding integrin
XX alpha4 and inhibit expression of integrin alpha4.
XX
XX Claim 12; Col 49; 49pp; English.
XX
XX The sequence is an antisense oligonucleotide targeting human integrin 4,
XX a protein involved in autoimmune and inflammatory diseases. The invention
XX relates to antisense inhibitors of integrin alpha 4 which target and
XX inhibit expression of integrin alpha 4. The antisense molecules are
XX useful for inhibiting the expression of integrin alpha4 in human cells or
XX tissues, treating an animal having a disease or condition associated with
XX expression of integrin alpha4, e.g., inflammatory disease or condition,
XX autoimmune disease or condition including rheumatoid arthritis, multiple
XX sclerosis and tumour metastases, melanoma, asthma, psoriasis, allergy,
XX Grave's disease, Hashimoto's thyroiditis, systemic lupus erythematosus
XX and allograft rejection, and diseases or conditions characterised by
XX leukocyte migration into affected tissues, preferably central nervous
XX system tissues. The antisense molecules are also useful for reducing the
XX levels of VLA-4 and alpha4beta7 integrin in human cells or tissues, and
XX reducing the adherence of cells of a first type e.g., melanoma cells or
XX lymphocytes, to cells of a second type e.g., endothelial cells, by
XX inhibiting integrin alpha4 expression and thus decreasing adhesion of
XX cells
XX
XX Sequence 20 BP; 2 A; 5 C; 3 G; 10 T; 0 U; 0 Other;
SQ
Query Match 18.6%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 3.5e+02;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 945 TGGTTTAAATGATCGCTACC 964
Db 1 TGCCTTAGTGTTCTCTACC 20

RESULT 64
ABL43747/c
ID ABL43747 standard; DNA; 20 BP.
XX
XX ABL43747;
XX
XX 11-APR-2002 (first entry)
XX
XX Human chromosome 1p36-35 PCR primer SEQ ID NO:791.
XX
XX Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
XX PCR primer; ss.
XX
XX Homo sapiens.
XX
XX JP2001321190-A.
XX
XX 20-NOV-2001.
XX
XX 12-MAR-2001; 2001JP-00068285.
XX
XX 10-MAR-2000; 2000JP-00066716.
XX

```

```

XX (RIKA ) RIKAGAKU KENKYUSHO.
PA (GENO-) GENOTEX YG.
XX
XX WPI; 2002-144136/19.
XX
XX Arraying genome clones.
XX
XX Claim 4; Page 20; 528pp; Japanese.
XX
XX The present invention describes a method of arraying genome clones. The
XX method comprises: (a) clones of the genomic libraries contained in
XX multiwell plates numbered for discrimination are mixed in each of the
XX multiwell plates; (b) a primer designed based on the chromosome marker
XX sequence is added to the mixture to carry out an amplification reaction;
XX (c) a signal corresponding to the marker is detected from the resultant
XX amplified product to specify the discrimination Nos. of the multiwell
XX plates containing the clones having said marker sequence; (d) the order
XX of the markers is changed so that the same discrimination Nos. succeed to
XX the maximum in the specified discrimination Nos. to array the multiwell
XX plates; (e) the clones in the multiwell plates of the specified
XX discrimination Nos. are mixed respectively in each wells of longitudinal
XX and lateral directions; (f) the mixed clones are cultured and the
XX resultant cultures are amplified by using the above primer; (g) signals
XX are detected from the amplified products; (h) the clones in the multiwell
XX plates are specified from the detected result; and (i) the clones are
XX reconstituted as the positions on the chromosome and arrayed. The
XX microarray is useful for gene analysis. ABL42957 to ABL45322 represent
XX PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
XX represent PCR primers for human chromosome 21q22.1, which are
XX specifically claimed for use in the present invention
XX
XX Sequence 20 BP; 12 A; 1 C; 7 G; 0 T; 0 U; 0 Other;
SQ
Query Match 18.6%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 3.5e+02;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 921 TTGCCTTTTATCCCTCTCT 940
Db 20 TTGCCCTTTTCCCTTTCT 1

RESULT 65
ABT05172/c
ID ABT05172 standard; DNA; 20 BP.
XX
XX ABT05172;
XX
XX 11-OCT-2002 (first entry)
XX
XX TNFR1 expression modulation related antisense oligo SEQ ID No 202.
XX
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX mouse; murine; ds.
XX
XX Mus sp.
XX
XX WO200248168-A1.
XX
XX 20-JUN-2002.
XX
XX 22-OCT-2001; 2001WO-US051224.
XX
XX 24-OCT-2000; 2000US-00695451.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Cowsert LM, Zhang H, Dean NM;
XX WPI; 2002-583481/62.
XX

```

Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

Example 21; Page 61; 121pp; English.

The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a mouse oligonucleotide relating to the TNFR1 of the invention

Sequence 20 BP; 8 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 18.6%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 3.5e+02;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

940 TTCATTGGTTTAAATGATCG 959  
||||| |||||||  
20 TTCATCAGTTAATGTGCG 1

RESULT 66

ABZ99185  
ABZ99185 standard; DNA; 20 BP.

ABZ99185;

17-OCT-2003 (first entry)

Human PDE4C oligonucleotide sequence.

Human; antisense; lung dysfunction; nasal airway dysfunction; antinflammatory steroid; ubiquinone; antinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.

Homo sapiens.

WO200285308-A2.

31-OCT-2002.

23-APR-2002; 2002WO-US013135.

24-APR-2001; 2001US-0286137P.

(EPIG-) EPIGENESIS PHARM INC.

Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D; Miller S, Tang L, Shahabuddin S;

WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubiquinone.

Disclosure; SEQ ID NO 14427; 872pp; English.

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the

CC initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of CC junctions of genes encoding a polypeptide associated with lung and/or CC nasal airway dysfunction and a second active agent comprising an CC antinflammatory steroid and ublquinone. A composition of the invention CC has antinflammatory, antiallergic, antiasthmatic, hypotensive, CC immunosuppressive, and cytostatic activity. The composition may have a CC use in antisense gene therapy. The composition is useful for treating or CC preventing a respiratory, lung or malignant disease or condition, also CC for enhancing the prophylactic or therapeutic respiratory effect of an CC antinflammatory steroid in a subject, for reducing or depleting levels CC of, or reducing sensitivity to adenosine, reducing levels of adenosine CC receptor, producing bronchodilation, increasing levels of ubiquinone or CC lung surfactant in a subject's tissue, or treating bronchoconstriction, CC lung inflammation, lung allergies, or a respiratory disease or condition. CC Note: the sequence data for this patent is not represented in the printed CC specification, but was obtained in electronic format directly from WIPO CC at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 20 BP; 0 A; 11 C; 0 G; 9 T; 0 U; 0 Other;

Query Match 18.6%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 3.5e+02;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 925 CTTTATCCCTCCTCTTCAT 944  
||||| |||||||  
Db 1 CTCCTCCCTCCTCTTCAT 20

RESULT 67

AA48785/c  
ID AAD48785 standard; DNA; 20 BP.

AA48785;

07-MAR-2003 (first entry)

yacM gene specific PCR primer 1.

S-yacM protein; S-yqeJ protein; pharmaceutical formulation; bacterial infection; antibacterial; PCR; primer; ss.

Unidentified.

WO200281652-A2.

17-OCT-2002.

21-FEB-2002; 2002WO-US005086.

23-FEB-2001; 2001US-00792251.

(MILL-) MILLENNIUM PHARM INC.

Fritz C, Youngman P, Guzman L;

WPI; 2003-058529/05.

Method for determining whether a test compound is a candidate antibacterial compound by its effect on the polypeptides encoded by the genes yacM and S-yqeJ.

Disclosure; Page 15; 49pp; English.

XX The invention relates to a method for determining whether a test compound CC is a candidate antibacterial compound. The method comprising: contacting CC an S-yacM or an S-yqeJ polypeptide with the test compound; and detecting CC interaction of the test compound with the S-yacM or S-yqeJ polypeptide, CC where an interaction indicates that the test compound is a candidate CC antibacterial compound. A method is claimed for treating a bacterial CC infection in an organism by administering a therapeutically effective CC amount of a pharmaceutical formulation and where the bacterial infection

CC is a Streptococcus infection. An antibacterial agent can also be  
 CC administered to treat a bacterial infection in an organism. The present  
 CC sequence is yacW gene specific PCR primer

SQ Sequence 20 BP; 11 A; 2 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 18.6%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 3.5e+02;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 905 TCATTTTCCTTGTGCTTTCG 924

||||| ||| |||||  
 20 TCATTTTCCTGCGCTTTCG 1

RESULT 68

ABA77714

ID ABA77714 standard; DNA; 17 BP.

XX AC ABA77714;

XX AC ABA77714;

XX AC ABA77714;

DT 24-JAN-2002 (first entry)

XX AC ABA77714;

DE Retinoblastoma mutation correcting oligonucleotide SEQ ID NO: 560.

XX Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;  
 KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;  
 KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;  
 KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;  
 KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;  
 KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;  
 KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;  
 KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;  
 KW Alzheimer's disease; cytosolic; antisticking; antianaemic; haemostatic;  
 KW antileptic; ss.

XX Homo sapiens.

XX WO200173002-A2.

XX WO200173002-A2.

XX 04-OCT-2001.

XX 27-MAR-2001; 2001WO-US009761.

XX 27-MAR-2000; 2000US-0192176P.

XX 27-MAR-2000; 2000US-0192176P.

XX 01-JUN-2000; 2000US-0208538P.

XX 30-OCT-2000; 2000US-0244989P.

XX (UYDE ) UNIV DELAWARE.

XX Kmiec EB, Gamper HB, Rice MC;

XX WPI; 2001-639230/73.

XX Oligonucleotide for targeted alterations of genetic sequences and for

XX treating cystic fibrosis, comprises at least one mismatch and chemical

XX modification.

XX Claim 7; Page 77; 294pp; English.

XX The present invention provides single-stranded oligonucleotides which can

XX be used for the targeted alteration of genomic sequences, where the

XX oligonucleotide has at least one mismatch compared with the genomic

XX sequence to be altered. In particular, these sequences are directed at

XX the following genes: adenosine deaminase, p53, beta-globin,

XX retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A

XX (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus

XX 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,

XX apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase

XX (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and

XX presenilin-2 (PSEN2). These can be used in the gene therapy of diseases

XX such as cancer, adenosine deaminase deficiency, cystic fibrosis,

CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,  
 CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and  
 CC various syndromes. The present sequence is one of the gene correcting  
 CC oligonucleotides of the invention

SQ Sequence 17 BP; 5 A; 4 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 18.4%; Score 13.4; DB 1; Length 17;

Best Local Similarity 93.3%; Pred. No. 3.4e+02;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 953 TGTATCGCTACCAAC 967

||||| ||| |||||  
 3 TGTATCGCTACCAAC 17

RESULT 69

ABA77713/C

ID ABA77713 standard; DNA; 17 BP.

XX AC ABA77713;

XX AC ABA77713;

DT 24-JAN-2002 (first entry)

XX AC ABA77713;

DE Retinoblastoma mutation correcting oligonucleotide SEQ ID NO: 559.

XX Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;  
 KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;  
 KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;  
 KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;  
 KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;  
 KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;  
 KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;  
 KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;  
 KW Alzheimer's disease; cytosolic; antisticking; antianaemic; haemostatic;  
 KW antileptic; ss.

XX Homo sapiens.

XX WO200173002-A2.

XX 04-OCT-2001.

XX 27-MAR-2001; 2001WO-US009761.

XX 27-MAR-2000; 2000US-0192176P.

XX 27-MAR-2000; 2000US-0192176P.

XX 01-JUN-2000; 2000US-0208538P.

XX 30-OCT-2000; 2000US-0244989P.

XX (UYDE ) UNIV DELAWARE.

XX Kmiec EB, Gamper HB, Rice MC;

XX WPI; 2001-639230/73.

XX Oligonucleotide for targeted alterations of genetic sequences and for

XX treating cystic fibrosis, comprises at least one mismatch and chemical

XX modification.

XX Claim 7; Page 77; 294pp; English.

XX The present invention provides single-stranded oligonucleotides which can

XX be used for the targeted alteration of genomic sequences, where the

XX oligonucleotide has at least one mismatch compared with the genomic

XX sequence to be altered. In particular, these sequences are directed at

XX the following genes: adenosine deaminase, p53, beta-globin,

XX retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A

XX (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus

XX 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,

XX apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase

XX (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and

XX presenilin-2 (PSEN2). These can be used in the gene therapy of diseases

such as cancer, adenosine deaminase deficiency, cystic fibrosis, haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia, Alzheimer's disease, melanoma, adenomatous polyposis of the colon and various syndromes. The present sequence is one of the gene correcting oligonucleotides of the invention

Sequence 17 BP; 6 A; 2 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 18.4%; Score 13.4; DB 1; Length 17;

Best Local Similarity 93.3%; Pred. No. 3.4e+02; Indels 0; Gaps 0; Matches 14; Conservative 0; Mismatches 1;

953 TGTATCGCTACCAAC 967

|||||||  
15 TGTATCGCTACCAAC 1

RESULT 70

ACDS3467

ACDS3467 standard; RNA; 17 BP.

ACDS3467;

24-SEP-2003 (first entry)

HBV G-cleaver substrate sequence #155.

Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme; amberyne; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degenerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.

Hepatitis B virus.

WO200281494-A1.

17-OCT-2002.

26-MAR-2002; 2002WO-US009187.

26-MAR-2001; 2001US-00817879.

08-JUN-2001; 2001US-00877478.

08-JUN-2001; 2001US-0296876P.

24-OCT-2001; 2001US-0335059P.

05-DEC-2001; 2001US-0337055P.

(RIBO-) RIBOZYME PHARM INC.

(BLAT/) BLATT L.

(MACE/) MACEJAK D.

(MCSW/) MCSWIGGEN J.

(MORR/) MORRISSEY D.

(PAVC/) PAVCO P.

(LEEP/) LEE P.

(DRAP/) DRAPER K.

(ROBE/) ROBERTS E.

Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;

Draper K, Roberts E;

WPI; 2003-229207/22.

Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus infection.

Example 1; Page 168; 387pp; English.

The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or

Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes, inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase and/or HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HBV ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberyne sequences disclosed in the present invention

XX Sequence 17 BP; 0 A; 2 C; 4 G; 0 T; 11 U; 0 Other;

Query Match 18.4%; Score 13.4; DB 1; Length 17;

Best Local Similarity 26.7%; Pred. No. 3.4e+02;

Matches 4; Conservative 10; Mismatches 1; Indels 0; Gaps 0;

QY 909 TTCTTTGCTCTTTG 923

|||||

Db 1 UUUUUUUUUUUU 15

RESULT 71

ACDS2078

ID ACDS2078 standard; RNA; 17 BP.

XX AC

ACDS2078;

DT 24-SEP-2003 (first entry)

XX HBV inozyme substrate sequence #208.

Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme; amberyne; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degenerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.

Hepatitis B virus.

WO200281494-A1.

17-OCT-2002.

26-MAR-2002; 2002WO-US009187.

26-MAR-2001; 2001US-00817879.

08-JUN-2001; 2001US-00877478.

08-JUN-2001; 2001US-0296876P.

24-OCT-2001; 2001US-0335059P.

05-DEC-2001; 2001US-0337055P.

(RIBO-) RIBOZYME PHARM INC.

(BLAT/) BLATT L.

(MACE/) MACEJAK D.

(MCSW/) MCSWIGGEN J.

(MORR/) MORRISSEY D.

(PAVC/) PAVCO P.

(LEEP/) LEE P.

(DRAP/) DRAPER K.

(ROBE/) ROBERTS E.

Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;

Draper K, Roberts E;



for treating a disease. This disease includes arachidonic acid metabolism, cancer or cardiovascular diseases. This sequence represents a primer used to isolate regions of the human cytochrome P450 polypeptide 2C8 gene (CYP2C8) in order to identify the single nucleotide polymorphism (SNP) in that region of different individuals useful in disease diagnosis

Sequence 19 BP; 3 A; 6 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 18.4%; Score 13.4; DB 1; Length 19;  
Best Local Similarity 93.3%; Pred. No. 3.7e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

899 CCTGGTCATTTCCT 913  
|||||||  
4 CCTGGTCATTTCCT 18

RESULT 74  
AAD39631  
AAD39631 standard; DNA; 20 BP.

AAD39631;

04-OCT-2002 (first entry)

Human SR-cyp antisense oligonucleotide, ISIS #123895.

Human; antisense; SR-cyp; Clk-associated RS cyclophilin; inflammation; hyperproliferative disorder; cancer; prophylaxis; infection; therapy; tumour; CARs-cyp; phosphorothioate backbone; ss.

Homo sapiens.  
Synthetic.

Key	Location/Qualifiers
modified_base	1..20
	/tag= a
	/mod_base= OTHER
	/note= "Phosphorothioate backbone"
modified_base	1..5
	/tag= b
	/mod_base= OTHER
	/note= "2'-methoxyethyl nucleotides"
modified_base	2
	/tag= d
	/mod_base= m5c
modified_base	8
	/tag= e
	/mod_base= m5c
modified_base	14
	/tag= f
	/mod_base= m5c
modified_base	16..20
	/tag= c
	/mod_base= OTHER
	/note= "2'-methoxyethyl nucleotides"
modified_base	19..20
	/tag= g
	/mod_base= m5c

WO200236809-A2.

10-MAY-2002.

30-OCT-2001; 2001WO-US047335.

03-NOV-2000; 2000US-00706197.

{ISIS-} ISIS PHARM INC.  
{COLD-} COLD SPRING HARBOR LAB.

Bennett CF, Spector DL, Wyatt JR;

DR WPI; 2002-479763/51.

XX Novel antisense compounds targeted to nucleic acids encoding SR-cyp, Clk-associated RS cyclophilin for modulating the gene expression and treating PT hyperproliferative disorders such as cancer.

XX Claim 3; Page 90; 117pp; English.

XX The invention relates to antisense compounds targetted to a nucleic acid molecule encoding human SR-cyp (Clk-associated RS cyclophilin) to inhibit its expression. SR-cyp is also referred to as CARs-cyp. Antisense compounds of the invention are used for treating diseases or conditions associated with SR-cyp. The diseases treated include hyperproliferative disorders e.g. cancer or hyperproliferative disorders resulting from an alternative splicing event. They are useful for diagnostics, therapeutics and as research reagents, e.g. prophylactically to prevent or delay infection, inflammation or tumour formation. They are also used in antisense therapy. The present sequence is an antisense oligonucleotide targetted to human SR-cyp

SQ Sequence 20 BP; 4 A; 5 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 18.4%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 3.8e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 900 CCTGGTCATTTCCT 914

|||||||  
2 CATGGTCATTTCCT 16

RESULT 75

AAD40931

ID AAD40931 standard; DNA; 20 BP.

XX AAD40931;

30-OCT-2002 (first entry)

Human HDAL antisense oligonucleotide ISIS #123712.

Human; histone deacetylase 1; HDAL; enzyme; hyperproliferative condition; viral infection; prophylactic; inflammation; phosphorothioate backbone; tumour; antisense; cytostatic; virucide; ss.

Homo sapiens.  
Synthetic.

Key	Location/Qualifiers
modified_base	1..20
	/tag= a
	/mod_base= OTHER
	/note= "Phosphorothioate backbone"
modified_base	1..5
	/tag= b
	/mod_base= OTHER
	/note= "2'-methoxyethyl residues"
modified_base	1..4
	/tag= d
	/mod_base= m5c
modified_base	6
	/tag= e
	/mod_base= m5c
modified_base	8
	/tag= f
	/mod_base= m5c
modified_base	9..10
	/tag= g
	/mod_base= m5c
modified_base	12..13
	/tag= h
	/mod_base= m5c
modified_base	15

```

FT      /*tag= i
FT      /mod_base= m5c
FT      16..20
FT      /*tag= c
FT      /mod_base= OTHER
FT      /note= "2'-methoxyethyl residues"
FT      18
FT      /*tag= j
FT      /mod_base= m5c
XX      WO200250244-A2.
XX      PM
XX      XX
XX      PD
XX      XX
XX      27-JUN-2002.
XX      XX
XX      PF 07-DEC-2001; 2001WO-US046518.
XX      XX
XX      PR 19-DEC-2000; 2000US-00745167.
XX      XX
XX      PA (ISIS-) ISIS PHARM INC.
XX      XX
XX      PI Monia BP, Wyatt JR;
XX      XX
XX      DR WPI; 2002-519880/55.
XX      XX
XX      PT Antisense compounds targeted against polynucleotides encoding Histone
XX      PT deacetylase 1 useful for treating hyperproliferative conditions, e.g.
XX      PT cancer of hematopoietic, lymphoid, myeloid or breast, or a viral
XX      PT infection.
XX      XX
XX      PS Claim 3; Page 94; 120pp; English.
XX      XX
XX      CC The present invention relates to antisense compounds, compositions and
XX      CC methods for modulating the expression of Histone deacetylase 1 (HDAl).
XX      CC Sequences of the invention are useful for inhibiting the expression of
XX      CC HDAl in cells or tissues and for treating an animal having a disease or
XX      CC condition associated with HDAl e.g., hyperproliferative condition, which
XX      CC is cancer of haematopoietic, lymphoid, myeloid or breast or a condition
XX      CC resulting from a viral infection. Antisense compounds either alone or in
XX      CC combination with other antisense compounds or therapeutics can be used as
XX      CC tools in differential and/or combinatorial analyses to elucidate the
XX      CC expression patterns of a portion or the entire complement of genes
XX      CC expressed within cells and tissues. They are commonly used as research
XX      CC reagents and diagnostics. They may also be useful prophylactically such
XX      CC as to prevent or delay infection, inflammation or tumour formation. The
XX      CC present DNA sequence is an antisense oligonucleotide targetted to human
XX      CC HDAl DNA
XX      XX
XX      SQ Sequence 20 BP; 1 A; 12 C; 1 G; 6 T; 0 U; 0 Other;
XX      XX
XX      Query Match 18.4%; Score 13.4; DB 1; Length 20;
XX      Best Local Similarity 93.3%; Pred. No. 3.8e+02;
XX      Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX      XX
XX      QY 929 TATCCCTCCTCTTCA 943
XX      DB 5 TCTCCCTCCTCTTCA 19
XX      XX
XX      RESULT 76
XX      ID AAX61163
XX      AC AAX61163 standard; DNA; 18 BP.
XX      XX
XX      DE 28-JUL-1999 (first entry)
XX      XX
XX      DE Human chromosome alpha-satellite region.
XX      XX
XX      KW Probe; human; chromosome 17 triple-helix forming oligonucleotide;
XX      KW genetic disorder; missing chromosome; aneuploidy; chromosome 21;
XX      KW infectious disease; diagnosis; alpha-satellite region; ss.
XX      XX
XX      OS Homo sapiens.

```

```

XX      WO9924622-A1.
XX      PN
XX      PD 20-MAY-1999.
XX      XX
XX      PF 10-NOV-1998; 98WO-US023765.
XX      XX
XX      PR 10-NOV-1997; 97US-0064997P.
XX      XX
XX      PA (UYPR-) UNIV PRINCETON.
XX      XX
XX      PI Johnson MD, Fresco JR;
XX      XX
XX      DR WPI; 1999-327425/27.
XX      XX
XX      PT Novel use of triple helix forming oligonucleotides, useful for in situ
XX      PT detection of double stranded target sequence.
XX      XX
XX      PS Claim 19; Page 12; 45pp; English.
XX      XX
XX      CC This sequence represents a human chromosome alpha-satellite region. The
XX      CC invention relates to the use of a triple-helix forming oligonucleotide
XX      CC for in situ detection of a double-stranded target nucleic acid sequence.
XX      CC The method can be used to detect a genetic disorder e.g. to detect an
XX      CC extra or missing chromosome or fragment or aneuploidy, especially for
XX      CC detecting an extra or missing chromosome 17 or 21. The method can be also
XX      CC be used to screen for individuals at risk of developing a disease or for
XX      CC diagnosing an infectious disease. The use of triple helix forming
XX      CC oligonucleotides allows in situ detection of double stranded target
XX      CC sequence as opposed to prior art uses of developing potential anti-gene
XX      CC therapeutic agents or artificial restriction endonucleases
XX      XX
XX      SQ Sequence 18 BP; 1 A; 6 C; 0 G; 11 T; 0 U; 0 Other;
XX      XX
XX      Query Match 18.1%; Score 13.2; DB 1; Length 18;
XX      Best Local Similarity 83.3%; Pred. No. 3.8e+02;
XX      Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX      XX
XX      QY 927 TTTATCCCTCCTCTTCAT 944
XX      DB 1 TTTCTCCTTCTCTTCAT 18
XX      XX
XX      RESULT 77
XX      ID AAX12832 standard; DNA; 19 BP.
XX      XX
XX      AC AAX12832;
XX      XX
XX      DT 25-MAR-2003 (revised)
XX      DT 09-OCT-1991 (first entry)
XX      XX
XX      DE Probe to human leukocyte antigen DNA.
XX      XX
XX      KW HLA; polymerase chain reaction; PCR; paternity testing;
XX      KW transplant compatibility; anthropology; HLA-DQalpha locus; ss.
XX      XX
XX      OS Synthetic.
XX      XX
XX      FH Key Location/Qualifiers
XX      FT modified_base 1
XX      FT /*tag= a
XX      FT /mod_base= aminotetraethylene glycol linker
XX      XX
XX      PN EP439208-A.
XX      XX
XX      PD 31-JUL-1991.
XX      XX
XX      PF 11-JAN-1991; 91EP-00200038.
XX      XX
XX      PR 22-JAN-1990; 90US-00468456.
XX      XX
XX      PA (EAST ) EASTMAN KODAK CO.

```

```

(CETU ) CETUS CORP.
(WUAL/) WU A. L.
(CLIN-) CLINICAL DIAGNOSTIC SYSTEMS INC.
(JOHN ) JOHNSON & JOHNSON CLINICAL DIAGNOSTICS INC.

Wu A, Chang C, Erlich HA;
WPI; 1991-224623/31.

Method for detecting HLA DNA - by amplifying the DNA using polymerase
chain reaction contacting with probe and detecting by peroxidase-avidin
conjugate.

Claim 9; Page 13; 13pp; English.

The probe is complementary to a biotinylated primer extension product
from the HLA-DQalpha locus. It is attached to a polymeric particle via an
ethylene glycol unit linker, to form an insoluble hybrid of probe and
primer extension product. The probe is highly efficient at hybridising
with the amplified PCR products and provides a rapid and simple means of
detecting HLA DNA. (Updated on 25-MAR-2003 to correct PA field.)

Sequence 19 BP; 0 A; 5 C; 5 G; 9 T; 0 U; 0 Other;

Query Match      18.1%; Score 13.2; DB 1; Length 19;
Best Local Similarity 83.3%; Pred. No. 4e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

915 TGGTCTTGGCTTTATC 932
|||||
2 TGGTCTTGGCTTCTC 19

--SULT 78
AAV02643/C
AAV02643 standard; DNA; 19 BP.

AAV02643;
25-MAR-2003 (revised)
08-APR-1998 (first entry)

S. epidermidis 16S-23S rRNA intergenic spacer region PCR primer 1.
Intergenic spacer region; 16S rRNA; 23S rRNA; bovine mastitis; diagnosis;
inflammation; infection; PCR primer; ss.

Synthetic.
Staphylococcus epidermidis.
WO9732038-A2.
04-SEP-1997.
26-FEB-1997; 97WO-FI000126.
27-FEB-1996; 96US-00607384.
(OULU-) OULUTECH LTD.

Alatossava J, Tilsala-Timisjaervi AK, Forsman PT;
WPI; 1997-448698/41.

Detecting mastitis by identifying in milk DNA indicating inflammation and
bacterial infection - also DNA indicative of antibiotic resistance,
provides rapid diagnosis, identifies causative agent and suggests
suitable treatment.

Claim 14; Page 21; 56pp; English.

PCR primers AAV02643 and AAV02644 are used to amplify the 16S-23S rRNA
intergenic spacer region from Staphylococcus epidermidis ATCC 12228, a
pathogenic bacteria which is a common cause of bovine mastitis. This
spacer region is used in a novel assay to diagnose mastitis in milk by
detecting DNA specific for somatic cells which is indicative of
inflammation or by detecting DNA specific for a mastitis pathogen which
is indicative of infection. This method is particularly useful for the
detection of mastitis caused by Streptococcus or Staphylococcus species.
The method is rapid, does not involve isolation of cells or bacteria and
may allow the causative agent to be identified. (Updated on 25-MAR-2003
to correct PI field.)

Sequence 19 BP; 7 A; 2 C; 6 G; 4 T; 0 U; 0 Other;

Query Match      18.1%; Score 13.2; DB 1; Length 19;
Best Local Similarity 83.3%; Pred. No. 4e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

929 TATCCCTCTCTTCATTG 946
|||||
19 TATCCCTCATCTTCGTAG 2

--RESULT 79
AAD35894/C
AAD35894 standard; DNA; 19 BP.

XX
AC AAD35894;
XX
DT 26-JUL-2002 (first entry)
XX
DE HIV gag CA and NC domain amplifying PCR primer, MSHIV3.
XX
KW Retroviral capsid assembly inhibitor; chimeric; Gag protein; HIV-1;
KW Betaretrovirus domain; infection; human immunodeficiency virus; PCR;
KW HIV-2; primer; CA domain; NC domain; ss.
XX
OS Human immunodeficiency virus.
XX
PN WO200226783-A2.
XX
PD 04-APR-2002.
XX
PF 28-SEP-2001; 2001WO-US030498.
XX
PR 28-SEP-2000; 2000US-0236273P.
XX
PA (UABR-) UAB RES FOUND.
XX
PI Sakalian M, Hunter E;
XX
DR WPI; 2002-372116/40.
XX
PT Screening for retroviral capsid assembly inhibitors, using chimeric
PT Betaretrovirus domain Gag polypeptides, which induce the assembly of Gag
PT polypeptides into viral capsids, useful for treating HIV.
XX
PS Example 2; Page 31; 90pp; English.
XX
CC The invention relates to a method for screening retroviral capsid
CC assembly inhibitors. The method involves contacting a chimeric Gag
CC polypeptide comprising a portion of Betaretrovirus domain and another
CC retroviral Gag polypeptide (the Betaretrovirus domain induces the
CC spontaneous assembly of the chimeric Gag polypeptide into viral capsids)
CC with a candidate inhibitor. The method is used to screen candidate agents
CC that may be used to treat retroviral infections especially those caused
CC by human immunodeficiency virus (HIV)-1 and HIV-2. The present sequence
CC is HIV gag CA and NC domain amplifying PCR primer used to generate
CC chimeric constructs of the invention
XX
SQ Sequence 19 BP; 10 A; 3 C; 5 G; 1 T; 0 U; 0 Other;

Query Match      18.1%; Score 13.2; DB 1; Length 19;
Best Local Similarity 83.3%; Pred. No. 4e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```



QY 912 CTTTGGCTTTGCTTTT 929  
DB 18 CTTTGGCTTTGCTTTAT 1

RESULT 80  
AAV49792/C  
ID AAV49792 standard; DNA; 20 BP.  
XX AC  
XX AAV49792;  
XX DT  
XX 02-NOV-1998 (first entry)  
XX DT  
XX Mouse haematopoietic marker PCR primer PECAM-1 (3').  
XX DE  
XX Mesoderm cell; haematopoiesis; vascular growth; embryo development;  
XX KW treatment; erythroid cell; blood; infection; myocardial ischaemia;  
XX KW hypervascularisation; hedgehog compound; modulator; gene therapy;  
XX KW PCR primer; ss.  
XX XX  
XX Synthetic.  
XX OS Mus sp.  
XX XX  
XX WO9835020-A2.  
XX PN  
XX 13-AUG-1998.  
XX PD  
XX 10-FEB-1998; 98WO-US002633.  
XX PF  
XX 10-FEB-1997; 97US-0037513P.  
XX PR  
XX 16-JUN-1997; 97US-0049763P.  
XX XX  
XX (HARD ) HARVARD COLLEGE.  
XX PA  
XX Baron MH, Farrington SM, Belaousoff M;  
XX PI WPI; 1998-447218/38.  
XX DR  
XX Stimulating differentiation of mesodermal cells to haematopoietic or  
XX PT vascular cells - by exposure to an equivalent, specifically hedgehog  
XX PT protein, of product of extra-embryonic tissue, for treating developmental  
XX PT abnormalities in utero, e.g. ischaemia, excessive vascular growth.  
XX XX  
XX Example 2; Page 38; 76pp; English.

AAV49781-V49806 are PCR primers used in a method of stimulating a  
population of undifferentiated mesodermally derived cells to undergo  
haematopoiesis and/or vascular growth by providing them with a compound  
that is functionally equivalent to a gene product expressed in extra-  
embryonic tissue. This method has applications in the treatment of  
developmental errors (in vascular growth or haematopoiesis), in an embryo  
in utero. The method can also be used in the treatment of conditions  
involving an abnormal number of erythroid cells e.g. anaemia,  
inflammation, cancer, organ failure, thrombocytopaenia, polycythaemia  
vera, erythroleukaemia and also other blood abnormalities such as the  
effects of radiation treatment, infection with human immune deficiency  
virus. This compound can also be used in the treatment of myocardial  
ischaemia, and hypervascularisation of genetic or degenerative origin  
(e.g. ocular neovascularisation of diabetes, breast cancer etc.), to  
promote revascularisation for healing wounds such as duodenal ulcers, in  
the treatment of excessive vascular growth by treating with a hedgehog  
compound that inhibits activity of the compound and in vitro or in vivo  
assays for determining activity of compounds that modulate haematopoiesis  
and vascular growth e.g. for screening libraries, to test growth factors,  
cytokines etc., to examine haematopoietic potential of other embryonic  
tissues, to monitor development of primary embryonic cells and vascular  
structures, to determine effects of targeted mutations and to study  
effects of gene therapy

Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;  
Query Match 18.1%; Score 13.2; DB 1; Length 20;

Best Local Similarity 83.3%; Pred. No. 4.1e+02;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 949 TTAATGATCGCTACCA 966  
DB 20 TTAGTGTTCGCTGCCAA 3

RESULT 81  
AAX93390/C  
ID AAX93390 standard; DNA; 20 BP.  
XX AC  
XX AAX93390;  
XX XX  
XX 13-SEP-1999 (first entry)  
XX DT  
XX PCR primer used to amplify an ORF of Chlamydia pneumoniae.  
XX DE  
XX Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;  
XX KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;  
XX KW neutralising epitope; PCR primer; ss.  
XX XX  
XX Synthetic.  
XX OS Chlamydothila pneumoniae.  
XX XX  
XX WO9927105-A2.  
XX PN  
XX 03-JUN-1999.  
XX PD  
XX 20-NOV-1998; 98WO-IB001890.  
XX PF  
XX 21-NOV-1997; 97ER-00014673.  
XX PR  
XX 04-NOV-1998; 98US-0107078P.  
XX XX  
XX (GEST ) GENSET.  
XX PA  
XX Griffais R;  
XX PI  
XX WPI; 1999-357842/30.  
XX DR  
XX Genome sequence of Chlamydia pneumoniae.  
XX PT  
XX Page 1588; Disclosure; 1912pp; English.

AAX91991-X97517 represent PCR primers used to amplify open reading frames  
and other nucleic acid sequences from the genome of Chlamydia pneumoniae  
(see AAX91990). C. pneumoniae causes respiratory disease such as  
pneumonia and bronchitis and is thought to be a contributing factor in  
heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema  
nodosum or pharyngitis. The polypeptides encoded by the open reading  
frames of the C. pneumoniae genome (see AAX34584-AAX35879) can be used  
in immunogenic compositions as vaccines. Vectors containing C. pneumoniae  
nucleotide sequences can also be used as immunogenic compositions,  
especially where the vector directs the expression of a neutralising  
epitope of C. pneumoniae

Sequence 20 BP; 8 A; 3 C; 7 G; 2 T; 0 U; 0 Other;  
Query Match 18.1%; Score 13.2; DB 1; Length 20;  
Best Local Similarity 83.3%; Pred. No. 4.1e+02;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 917 GTCCTTGCTTTTATCCC 934  
DB 18 GTCCTTGCTTTATCCC 1

RESULT 82  
AAS16412/C  
ID AAS16412 standard; DNA; 20 BP.  
XX AC  
XX AAS16412;  
XX XX

05-JUN-2002 (first entry)  
 Haematopoietic marker PECAM-1, 3' PCR primer.  
 Haematopoiesis; PECAM-1; mesodermal precursor cell; vasotropic;  
 sonic hedgehog; desert hedgehog; indian hedgehog; moonrat hedgehog;  
 tiggly winkle hedgehog; haemostatic; cytostatic; anaemia; leukopenia;  
 chronic inflammatory disease; cancer; organ failure; thrombocytopenia;  
 ischaemia; tumour; diabetes; aging; hypervascularisation; trauma;  
 infection; neovascularisation; AIDS; acquired immunodeficiency virus;  
 leukaemia; arthritis; polycythaemia vera; erythroleukaemia;  
 transgenic mouse; PCR primer; ss.  
 Mus sp.  
 US2001041668-A1.  
 15-NOV-2001.  
 10-FEB-1998; 98US-00021660.  
 10-FEB-1998; 98US-00021660.  
 (HARD ) HARVARD COLLEGE.  
 Baron MH, Farrington SM, Belaussoff M;  
 WPI; 2002-017219/02.  
 Stimulating differentiation of mesodermal cells, useful e.g. for treating  
 anemia or ischemia, comprises treatment with functional equivalent of  
 protein expressed in embryonic tissue.  
 Example 2B; Page 15; 41pp; English.  
 The invention describes a novel method of stimulating a population of  
 undifferentiated mesodermally derived cells to undergo haematopoiesis  
 and/or vascular growth. This involves treating cells with a compound that  
 is functionally equivalent to a gene product expressed in an embryo's  
 extraembryonic tissue e.g. the hedgehog family including sonic, desert,  
 indian, moonrat and tiggly winkle, to modulate differentiation and  
 proliferation of mesodermal precursor cells. The method is used to treat  
 developmental errors in vascular growth and haematopoiesis in utero, to  
 modulate disorders associated with an abnormal number of erythroid cells  
 e.g. polycythaemia vera, erythroleukaemia and anaemia (including  
 idiopathic, constitutional or secondary aplastic, or myelodysplastic  
 forms, where induced by virus, chronic inflammatory disease, cancer,  
 organ failure or drugs, or thrombocytopenia) but also leukopenia (caused  
 by radiation, chemotherapy or infections) e.g. leukaemia, AIDS, to treat  
 tissue ischaemia (specifically myocardial) and hypervascularisation  
 associated with genetic or inherited diseases, trauma, infections and  
 aging, or neovascularisation, e.g. in tumours, diabetes, arthritis etc.  
 This sequence is the haematopoietic marker PECAM-1 (not defined in the  
 specification) 3' PCR primer, used with 5' PCR primer AAS16411, to  
 demonstrate gastrulation by expression of haematopoietic and endothelial  
 markers described in the method of the invention  
 Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 18.1%; Score 13.2; DB 1; Length 20;  
 Best Local Similarity 83.3%; Pred. No. 4.1e+02;  
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 949 TTAATGTCGCTACCA 966  
 20 TTAGTGTTCGTCGCA 3  
 RESULT 83  
 HZ21766/c  
 ABZ21766 standard; DNA; 20 BP.  
 ABZ21766;  
 05-JUN-2002 (first entry)  
 Haematopoietic marker PECAM-1, 3' PCR primer.  
 Haematopoiesis; PECAM-1; mesodermal precursor cell; vasotropic;  
 sonic hedgehog; desert hedgehog; indian hedgehog; moonrat hedgehog;  
 tiggly winkle hedgehog; haemostatic; cytostatic; anaemia; leukopenia;  
 chronic inflammatory disease; cancer; organ failure; thrombocytopenia;  
 ischaemia; tumour; diabetes; aging; hypervascularisation; trauma;  
 infection; neovascularisation; AIDS; acquired immunodeficiency virus;  
 leukaemia; arthritis; polycythaemia vera; erythroleukaemia;  
 transgenic mouse; PCR primer; ss.  
 Mus sp.  
 US2001041668-A1.  
 15-NOV-2001.  
 10-FEB-1998; 98US-00021660.  
 10-FEB-1998; 98US-00021660.  
 (HARD ) HARVARD COLLEGE.  
 Baron MH, Farrington SM, Belaussoff M;  
 WPI; 2002-017219/02.  
 Stimulating differentiation of mesodermal cells, useful e.g. for treating  
 anemia or ischemia, comprises treatment with functional equivalent of  
 protein expressed in embryonic tissue.  
 Example 2B; Page 15; 41pp; English.  
 The invention describes a novel method of stimulating a population of  
 undifferentiated mesodermally derived cells to undergo haematopoiesis  
 and/or vascular growth. This involves treating cells with a compound that  
 is functionally equivalent to a gene product expressed in an embryo's  
 extraembryonic tissue e.g. the hedgehog family including sonic, desert,  
 indian, moonrat and tiggly winkle, to modulate differentiation and  
 proliferation of mesodermal precursor cells. The method is used to treat  
 developmental errors in vascular growth and haematopoiesis in utero, to  
 modulate disorders associated with an abnormal number of erythroid cells  
 e.g. polycythaemia vera, erythroleukaemia and anaemia (including  
 idiopathic, constitutional or secondary aplastic, or myelodysplastic  
 forms, where induced by virus, chronic inflammatory disease, cancer,  
 organ failure or drugs, or thrombocytopenia) but also leukopenia (caused  
 by radiation, chemotherapy or infections) e.g. leukaemia, AIDS, to treat  
 tissue ischaemia (specifically myocardial) and hypervascularisation  
 associated with genetic or inherited diseases, trauma, infections and  
 aging, or neovascularisation, e.g. in tumours, diabetes, arthritis etc.  
 This sequence is the haematopoietic marker PECAM-1 (not defined in the  
 specification) 3' PCR primer, used with 5' PCR primer AAS16411, to  
 demonstrate gastrulation by expression of haematopoietic and endothelial  
 markers described in the method of the invention  
 Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 18.1%; Score 13.2; DB 1; Length 20;  
 Best Local Similarity 83.3%; Pred. No. 4.1e+02;  
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 949 TTAATGTCGCTACCA 966  
 20 TTAGTGTTCGTCGCA 3  
 RESULT 83  
 HZ21766/c  
 ABZ21766 standard; DNA; 20 BP.  
 ABZ21766;  
 28-FEB-2003 (first entry)  
 Serine/threonine kinase AIM-1 gene antisense oligonucleotide 4.  
 Serine/threonine kinase; enzyme; AIM-1; antisense oligonucleotide; human;  
 liver cancer; tumour; inhibition; ss.  
 Homo sapiens.  
 Synthetic.  
 CN1358732-A.  
 17-JUL-2002.  
 11-DEC-2000; 2000CN-00134534.  
 11-DEC-2000; 2000CN-00134534.  
 (RADI-) INST RADIO MEDICINE MILITARY MEDICAL ACAD.  
 Wang S, Lin L, Guan W;  
 WPI; 2002-733523/80.  
 Antisense oligonucleotide structure and use using serine/threonine kinase  
 AIM-1 gene as target.  
 Claim 1; Page 1 (Claims); 9pp; Chinese.  
 ABZ21763 to ABZ21774 represent antisense oligonucleotides for the  
 serine/threonine kinase AIM-1 gene. Also described is a human liver  
 cancer (HepG2) cell strain and a Balb/c (nu/nu) nude mouse inoculative  
 liver cancer cell which can be used as models for screening and  
 evaluation of the 12 antisense oligonucleotides. In vitro studies show  
 that the antisense oligonucleotides can effectively inhibit the growth of  
 human liver cancer, and have a dose-dependent relationship, and in the  
 nude mouse they can also effectively inhibit the growth of cancer, so  
 they can be used for treating and reducing tumours and its related  
 diseases  
 Sequence 20 BP; 9 A; 1 C; 6 G; 4 T; 0 U; 0 Other;  
 Query Match 18.1%; Score 13.2; DB 1; Length 20;  
 Best Local Similarity 83.3%; Pred. No. 4.1e+02;  
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 936 CCTCTCATTCGTTTAAAT 953  
 19 CCTCTCCTCTTCTTTAAAT 2  
 RESULT 84  
 ABZ298885  
 ID ABZ298885 standard; DNA; 20 BP.  
 ABZ298885;  
 17-OCT-2003 (first entry)  
 Human PDE4A oligonucleotide sequence.  
 Human; antisense; lung dysfunction; nasal airway dysfunction;  
 antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
 antisthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
 antisense gene therapy; respiratory; lung; adenosine sensitivity;  
 adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
 lung inflammation; respiratory disease; ds.  
 Homo sapiens.  
 WO200285308-A2.  
 XX

PJ 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 14127; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine or  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 0 A; 10 C; 0 G; 10 T; 0 U; 0 Other;  
  
Query Match 18.1%; Score 13.2; DB 1; Length 20;  
Best Local Similarity 83.3%; Pred. No. 4.1e+02;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 927 TTTATCCCTCCTCTTCAT 944  
||| | ||||| |||||  
Db 1 TTTCTTCTCCTCTTCCT 18  
  
RESULT 85  
ADE43679  
ID ADE43679 standard; DNA; 20 BP.  
XX  
AC ADE43679;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE Human KNSL1 sequencing primer, SEQ ID 284.  
XX  
KW Neurodegenerative disease; uPA; SNGC; IDE; KNSL1; LIPA; TNFRSF6;  
FW Alzheimer's disease; neuroprotective; nontropic; gene therapy;  
FW Chromosome 10; PCR; primer; ss.  
XX  
CS Homo sapiens.  
XX  
FN WO2003054143-A2.  
XX  
PD 03-JUL-2003.  
XX  
PF 25-OCT-2002; 2002WO-US034679.

XX 25-OCT-2001; 2001US-0339525P.  
PR 08-NOV-2001; 2001US-0336929P.  
PR 08-NOV-2001; 2001US-0338010P.  
PR 09-NOV-2001; 2001US-0338363P.  
PR 04-DEC-2001; 2001US-0337052P.  
PR 28-MAR-2002; 2002US-0368919P.  
XX  
PA (NEUR-) NEUROGENETICS INC.  
PA (GEHO) GEN HOSPITAL CORP.  
XX  
PI Becker KD, Velicelebi G, Elliott KJ, Wang X, Tanzi RE, Bertram L;  
PI Saunders AJ, Mullin KM, Sampson AJ, Blacker DL;  
XX  
DR WPI; 2003-559131/52.  
XX  
PT Determining a predisposition for or the occurrence of neurodegenerative  
PT disease, e.g. Alzheimer's disease by detecting in a target nucleic acid  
PT the presence or absence of an allelic variant of one or more polymorphic  
PT regions.  
XX  
FS Example 3; Page 290; 848pp; English.  
XX  
CC The present invention relates to a method (M1) for determining a  
CC predisposition for or the occurrence of neurodegenerative disease in a  
CC subject. The method comprises detecting in a target nucleic acid obtained  
CC from the subject the presence or absence of an allelic variant of one or  
CC more polymorphic regions of one or more genes selected from uPA  
CC (Urokinase plasminogen activator), SNGC (gamma-synuclein), IDE (insulin-  
CC degrading enzyme), KNSL1 (Kinesin-like protein 1), LIPA (lysosomal acid  
CC lyase), and TNFRSF6 (tumour Necrosis Factor Receptor-SF6), where the  
CC presence of at least one of the allelic variant of one or more  
CC polymorphic regions is indicative of a predisposition for or the  
CC occurrence of neurodegenerative disease. The genes are all located on  
CC chromosome 10. M1 is useful for determining a predisposition for or the  
CC occurrence of, and for treating neurodegenerative disease, particularly  
CC Alzheimer's disease. The present sequence is a PCR primer, which was used  
CC in the method of the invention.  
XX  
SQ Sequence 20 BP; 6 A; 3 C; 4 G; 7 T; 0 U; 0 Other;  
  
Query Match 18.1%; Score 13.2; DB 1; Length 20;  
Best Local Similarity 83.3%; Pred. No. 4.1e+02;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 949 TTAATGATCGCTACCAA 966  
||| | ||||| |||||  
Db 3 TGAATGTTTAGCTACCAA 20  
  
RESULT 86  
ADB42940  
ID ADB42940 standard; DNA; 17 BP.  
XX  
AC ADB42940;  
XX  
DT 18-DEC-2003 (revised)  
DT 04-DEC-2003 (first entry)  
XX  
DE Tumour suppression/reversion associated nucleotide #3263.  
XX  
KW cytostatic; antiviral; neuroprotective; nontropic; neuroleptic; ss;  
KW primer; probe; tumour suppression; tumour reversion; apoptosis;  
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;  
KW diagnosis.  
XX  
OS Homo sapiens.  
XX  
FN WO2003040369-A2.  
XX  
PD 15-MAY-2003.  
XX  
PF 17-SEP-2002; 2002WO-IB004219.

```
1 17-SEP-2001; 2001EP-00011981.
2 (MOLB-) MOLECULAR ENGINES LAB.
3
4 Teherman A, Amson R, Tuijnder M;
5 WPI; 2003-441574/41.
6
7 New nucleic acid encoding human prostate membrane-specific antigen,
8 useful e.g. for treatment of tumors and viral infection, also related
9 polypeptide and antibodies.
10 Disclosure; Page 413; 771pp; French.
11
12 The invention relates to the isolation of 6327 nucleotide sequences,
13 fragments of at least 15 consecutive nucleotides of these nucleotides, a
14 sequence having at least 80% identity, after optimal alignment, with the
15 nucleotides, a sequence that hybridizes under stringent conditions with
16 the nucleotides, or the complement, or corresponding RNA, of the
17 nucleotides. The nucleotides are used as probes or primers for detecting,
18 identifying, quantifying and/or amplifying nucleic acids, as in vitro
19 sense and antisense sequences, of nucleotides involved in tumour
20 suppression or reversion, apoptosis and or viral resistance, to produce
21 recombinant polypeptides, and to prepare transgenic animals, as
22 experimental models. The nucleotides (also vectors containing them and
23 cells containing the vectors), the encoded polypeptides and antibodies
24 (Ab) against the polypeptide are useful for prevention and/or treatment
25 of viral infections or diseases characterized by development of tumours
26 or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
27 Analysis of the expression of the nucleotides can be used for diagnosis
28 and/or prognosis of these diseases. The nucleotides and polypeptides can
29 also be used to screen for their specific interactive molecules,
30 potentially useful for treating diseases associated with abnormal
31 expression of the nucleotides.
32
33 Sequence 17 BP; 2 A; 4 C; 2 G; 9 T; 0 U; 0 Other;
34
35 Query Match 17.8%; Score 13; DB 1; Length 17;
36 Best Local Similarity 100.0%; Pred. No. 4e+02;
37 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
38
39 / 919 CTTTGCCTTTTAT 931
40 |||||
41 5 CTTTGCCTTTTAT 17
42
43 RESULT 87
44 A98826
45 ACA98826 standard; DNA; 19 BP.
46
47 ACA98826;
48
49 28-JUL-2003 (first entry)
50
51 Human CYP2C8 SNP detection PCR primer #266.
52
53 Cytochrome P450 polypeptide 2C8; CYP2C8; arachidonic acid metabolism;
54 cancer; cardiovascular disease; cytostatic; cardiovascular; gene therapy;
55 single nucleotide polymorphism detection; SNP detection; PCR; primer; ss.
56
57 Homo sapiens.
58
59 WO200299099-A2.
60
61 12-DEC-2002.
62
63 31-MAY-2002; 2002WO-EP006000.
64
65 01-JUN-2001; 2001EP-00112899.
66
67 (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
68
69 Penger A, Sprenger R, Brinkmann U;
70 WPI; 2003-167344/16.
71
72 New polymorphic variants of the gene encoding Cytochrome P450 polypeptide
73 2C8 (CYP2C8), useful for diagnosing or treating a disease, e.g.
74 arachidonic acid metabolism, cancer or cardiovascular diseases.
75
76 Example 2; Page 53; 178pp; English.
77
78 The invention describes a new polynucleotide comprises a polynucleotide:
79 (a) having any of 101 nucleic acid sequences with 18-19 bp fully defined
80 in the specification; (b) encoding any of seven polypeptides having 7
81 amino acids, or a polypeptide with 3 amino acids; (c) capable of
82 hybridising to a Cytochrome P450 polypeptide 2C8 (CYP2C8) gene; (d)
83 encoding a molecular CYP2C8 variant polypeptide or its fragment. The
84 polynucleotide, gene, vector, polypeptide or antibody is useful for
85 diagnosing or treating a disease, for preparing a diagnostic composition
86 for diagnosing a disease, or for preparing a pharmaceutical composition
87 for treating a disease. This disease includes arachidonic acid
88 metabolism, cancer or cardiovascular diseases. This sequence represents a
89 primer used to isolate regions of the human cytochrome P450 polypeptide
90 2C8 gene (CYP2C8) in order to identify the single nucleotide polymorphism
91 (SNP) in that region of different individuals useful in disease diagnosis
92
93 Sequence 19 BP; 3 A; 6 C; 3 G; 6 T; 0 U; 1 Other;
94
95 Query Match 17.8%; Score 13; DB 1; Length 19;
96 Best Local Similarity 86.7%; Pred. No. 4.3e+02;
97 Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
98
99 QY 899 CCTGTGCTCACTTTCT 913
100 |||||
101 4 CCTGTGCTCACTTTCT 18
102
103 Db
104
105 RESULT 88
106 ACA98829/C
107 ID ACA98829 standard; DNA; 19 BP.
108
109 XX ACA98829;
110
111 XX 28-JUL-2003 (first entry)
112
113 XX Human CYP2C8 SNP detection PCR primer #269.
114
115 XX Cytochrome P450 polypeptide 2C8; CYP2C8; arachidonic acid metabolism;
116 cancer; cardiovascular disease; cytostatic; cardiovascular; gene therapy;
117 single nucleotide polymorphism detection; SNP detection; PCR; primer; ss.
118
119 OS Homo sapiens.
120
121 XX WO200299099-A2.
122
123 XX 12-DEC-2002.
124
125 XX 31-MAY-2002; 2002WO-EP006000.
126
127 XX 01-JUN-2001; 2001EP-00112899.
128
129 XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
130
131 XX Penger A, Sprenger R, Brinkmann U;
132 XX WPI; 2003-167344/16.
133
134 XX New polymorphic variants of the gene encoding Cytochrome P450 polypeptide
135 2C8 (CYP2C8), useful for diagnosing or treating a disease, e.g.
136 arachidonic acid metabolism, cancer or cardiovascular diseases.
137
138 XX Example 2; Page 53; 178pp; English.
139
140 XX The invention describes a new polynucleotide comprises a polynucleotide:
```

```
PI Penger A, Sprenger R, Brinkmann U;
XX WPI; 2003-167344/16.
XX
XX New polymorphic variants of the gene encoding Cytochrome P450 polypeptide
XX 2C8 (CYP2C8), useful for diagnosing or treating a disease, e.g.
XX arachidonic acid metabolism, cancer or cardiovascular diseases.
XX
XX Example 2; Page 53; 178pp; English.
XX
XX The invention describes a new polynucleotide comprises a polynucleotide:
XX (a) having any of 101 nucleic acid sequences with 18-19 bp fully defined
XX in the specification; (b) encoding any of seven polypeptides having 7
XX amino acids, or a polypeptide with 3 amino acids; (c) capable of
XX hybridising to a Cytochrome P450 polypeptide 2C8 (CYP2C8) gene; (d)
XX encoding a molecular CYP2C8 variant polypeptide or its fragment. The
XX polynucleotide, gene, vector, polypeptide or antibody is useful for
XX diagnosing or treating a disease, for preparing a diagnostic composition
XX for diagnosing a disease, or for preparing a pharmaceutical composition
XX for treating a disease. This disease includes arachidonic acid
XX metabolism, cancer or cardiovascular diseases. This sequence represents a
XX primer used to isolate regions of the human cytochrome P450 polypeptide
XX 2C8 gene (CYP2C8) in order to identify the single nucleotide polymorphism
XX (SNP) in that region of different individuals useful in disease diagnosis
XX
XX Sequence 19 BP; 3 A; 6 C; 3 G; 6 T; 0 U; 1 Other;
XX
XX Query Match 17.8%; Score 13; DB 1; Length 19;
XX Best Local Similarity 86.7%; Pred. No. 4.3e+02;
XX Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 899 CCTGTGCTCACTTTCT 913
XX |||||
XX Db 4 CCTGTGCTCACTTTCT 18
XX
XX RESULT 88
XX ACA98829/C
XX ID ACA98829 standard; DNA; 19 BP.
XX
XX XX ACA98829;
XX
XX XX 28-JUL-2003 (first entry)
XX
XX XX Human CYP2C8 SNP detection PCR primer #269.
XX
XX XX Cytochrome P450 polypeptide 2C8; CYP2C8; arachidonic acid metabolism;
XX cancer; cardiovascular disease; cytostatic; cardiovascular; gene therapy;
XX single nucleotide polymorphism detection; SNP detection; PCR; primer; ss.
XX
XX OS Homo sapiens.
XX
XX XX WO200299099-A2.
XX
XX XX 12-DEC-2002.
XX
XX XX 31-MAY-2002; 2002WO-EP006000.
XX
XX XX 01-JUN-2001; 2001EP-00112899.
XX
XX XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
XX XX Penger A, Sprenger R, Brinkmann U;
XX XX WPI; 2003-167344/16.
XX
XX XX New polymorphic variants of the gene encoding Cytochrome P450 polypeptide
XX 2C8 (CYP2C8), useful for diagnosing or treating a disease, e.g.
XX arachidonic acid metabolism, cancer or cardiovascular diseases.
XX
XX XX Example 2; Page 53; 178pp; English.
XX
XX XX The invention describes a new polynucleotide comprises a polynucleotide:
```

CC (a) having any of 101 nucleic acid sequences with 18-19 bp fully defined  
 CC in the specification; (b) encoding any of seven polypeptides having 7  
 CC amino acids, or a polypeptide with 3 amino acids; (c) capable of  
 CC hybridising to a cytochrome P450 polypeptide 2C8 (CYP2C8) gene; (d)  
 CC encoding a molecular CYP2C8 variant polypeptide or its fragment. The  
 CC polynucleotide, gene, vector, polypeptide or antibody is useful for  
 CC diagnosing or treating a disease, for preparing a diagnostic composition  
 CC for diagnosing a disease, or for preparing a pharmaceutical composition  
 CC for treating a disease. This disease includes arachidonic acid  
 CC metabolism, cancer or cardiovascular diseases. This sequence represents a  
 CC primer used to isolate regions of the human cytochrome P450 polypeptide  
 CC 2C8 gene (CYP2C8) in order to identify the single nucleotide polymorphism  
 CC (SNP) in that region of different individuals useful in disease diagnosis  
 XX  
 SQ Sequence 19 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 1 Other;  
 Query Match 17.8%; Score 13; DB 1; Length 19;  
 Best Local Similarity 86.7%; Pred. No. 4.3e+02;  
 Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
 QY 899 CCCTGGTCATTCTTCT 913  
 |||||:||||  
 Fb 16 CCCTGGYCACTTCT 2  
 RESULT 89  
 ABV83095/c  
 ID ABV83095 standard; DNA; 17 BP.  
 AC ABV83095;  
 XX  
 XX  
 DT 03-JAN-2003 (first entry)  
 XX  
 DE Human HTPL scanning oligonucleotide SEQ ID 4341.  
 XX  
 DE Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;  
 KW human testis expressed Patched like protein; testis; adrenal; liver;  
 KW male germ cell development; bone marrow; brain; kidney; lung; placenta;  
 KW prostate; skeletal muscle; colon; male infertility; cancer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 EN EP1229046-A2.  
 XX  
 ED 07-AUG-2002.  
 XX  
 PF 28-JAN-2002; 2002EP-00001167.  
 XX  
 PR 30-JAN-2001; 2001WO-US000663.  
 PR 30-JAN-2001; 2001WO-US000664.  
 PR 30-JAN-2001; 2001WO-US000665.  
 PR 30-JAN-2001; 2001WO-US000667.  
 PR 30-JAN-2001; 2001WO-US000668.  
 PR 23-MAY-2001; 2001US-00864761.  
 PR 09-OCT-2001; 2001US-0327898P.  
 XX  
 XX (AEOM-) AEOMICA INC.  
 XX  
 XX Zhan J;  
 XX  
 UR WPI; 2002-676582/73.  
 XX  
 PT Novel isolated human testis expressed Patched like protein (HTPL), useful  
 PT for identifying agonist and antagonist and specific binding partners, and  
 PT for treating subjects having defects in HTPL.  
 XX  
 PS Example 2; Page 633; 718pp; English.  
 XX  
 CC The present invention relates to human testis expressed Patched like  
 CC protein (HTPL, see ABV78759 to ABV78762 and ABV98519 to ABV98520). HTPL  
 CC has two isoforms, with a few single base pair differences between the  
 CC two. One of the single base pair changes introduces a premature stop

CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL  
 CC shares an overall structure organisation with the Patched protein. The  
 CC shared structural features strongly imply that HTPL plays a role similar  
 CC to that of Patched, and is a potential tumour suppressor. HTPL is  
 CC important in regulating male germ cell development, and the HTPL gene was  
 CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are  
 CC useful for diagnosing a disorder caused by mutation in HTPL, and in  
 CC therapy and manufacture of a medicament for treatment or prevention of  
 CC such disorder associated with decreased expression or activity of human  
 CC HTPL. Such disorders include disorders of testis, or adrenal, adult and  
 CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,  
 CC skeletal muscle or colon function. HTPL proteins and nucleic acids are  
 CC clinically useful diagnostic markers and potential therapeutic agents for  
 CC male infertility and cancer. The present oligonucleotide was used in an  
 CC example from the invention  
 XX  
 SQ Sequence 17 BP; 10 A; 4 C; 2 G; 1 T; 0 U; 0 Other;  
 Query Match 17.5%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4.3e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 914 TTGGTCCTTGCTTTT 929  
 |||||:||||  
 Db 17 TTGGTCCTTGACTTGT 2  
 RESULT 90  
 ABV83096/c  
 ID ABV83096 standard; DNA; 17 BP.  
 AC ABV83096;  
 XX  
 XX  
 DT 03-JAN-2003 (first entry)  
 XX  
 DE Human HTPL scanning oligonucleotide SEQ ID 4342.  
 XX  
 DE Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;  
 KW human testis expressed Patched like protein; testis; adrenal; liver;  
 KW male germ cell development; bone marrow; brain; kidney; lung; placenta;  
 KW prostate; skeletal muscle; colon; male infertility; cancer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 EN EP1229046-A2.  
 XX  
 ED 07-AUG-2002.  
 XX  
 PF 28-JAN-2002; 2002EP-00001167.  
 XX  
 PR 30-JAN-2001; 2001WO-US000663.  
 PR 30-JAN-2001; 2001WO-US000664.  
 PR 30-JAN-2001; 2001WO-US000665.  
 PR 30-JAN-2001; 2001WO-US000667.  
 PR 30-JAN-2001; 2001WO-US000668.  
 PR 23-MAY-2001; 2001US-00864761.  
 PR 09-OCT-2001; 2001US-0327898P.  
 XX  
 XX (AEOM-) AEOMICA INC.  
 XX  
 XX Zhan J;  
 XX  
 UR WPI; 2002-676582/73.  
 XX  
 PT Novel isolated human testis expressed Patched like protein (HTPL), useful  
 PT for identifying agonist and antagonist and specific binding partners, and  
 PT for treating subjects having defects in HTPL.  
 XX  
 PS Example 2; Page 633; 718pp; English.  
 XX  
 CC The present invention relates to human testis expressed Patched like  
 CC protein (HTPL, see ABV78759 to ABV78762 and ABV98519 to ABV98520). HTPL  
 CC has two isoforms, with a few single base pair differences between the  
 CC two. One of the single base pair changes introduces a premature stop

has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTP-L-S (S for short) compared to HTP-L-L (L for long). HTP-L shares an overall structure organisation with the Patched protein. The shared structural features strongly imply that HTP-L plays a role similar to that of Patched, and is a potential tumour suppressor. HTP-L is important in regulating male germ cell development, and the HTP-L gene was mapped to human chromosome 10p12.1. HTP-L and its coding sequence are useful for diagnosing a disorder caused by mutation in HTP-L, and in therapy and manufacture of a medicament for treatment or prevention of such disorder associated with decreased expression or activity of human HTP-L. Such disorders include disorders of testis, or adrenal, adult and foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTP-L proteins and nucleic acids are clinically useful diagnostic markers and potential therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an example from the invention

Sequence 17 BP; 9 A; 4 C; 2 G; 2 T; 0 U; 0 Other;  
Query Match 17.5%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Y 914 TTGGTCTTTGCCCTTT 929  
|||||||  
b 16 TTGGTCTTTGACTGT 1

RESULT 91

ABT38079  
ABT38079 standard; DNA; 17 BP.

ABT38079;

12-JUN-2003 (first entry)

Tumour suppression related human fukutin oligo SEQ ID No 3716.

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.

Homo sapiens.

WO2003025175-A2.

27-MAR-2003.

17-SEP-2002; 2002WO-IB004208.

17-SEP-2001; 2001FR-00011978.

(MOLE-) MOLECULAR ENGINES LAB.

Telerman A, Anson R, Tuijnder M;

WPI; 2003-313353/30.

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

Disclosure; Page 468; 720pp; French.

The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting,

identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention

Sequence 17 BP; 3 A; 6 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 17.5%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 930 ATCCCTCTCTTCATT 945

|||||  
Db 2 ATCCCTCTCTTCATT 17

RESULT 92

ABZ60690

ID ABZ60690 standard; RNA; 17 BP.

ABZ60690;

21-MAR-2003 (first entry)

Human K-Ras DNzyme substrate #802.

Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV; anti-rheumatic; cancer; AIDS; ss.

Homo sapiens.

WO200297114-A2.

05-DEC-2002.

29-MAY-2002; 2002WO-US016840.

29-MAY-2001; 2001US-0294140P.

06-JUN-2001; 2001US-0296249P.

10-SEP-2001; 2001US-0318471P.

(RIBO-) RIBOZYME PHARM INC.

Mcswiggen J;

WPI; 2003-140484/13.

Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.

Claim 58; Page 100; 185pp; English.

The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate,



26-JAN-2000 (first entry)  
Cellular inhibitor of apoptosis-2 phosphorothioate antisense oligo #29.  
Identification; genetic target; gene modulation; human; probe;  
antisense oligonucleotide; phosphorothioate; PCR primer;  
nucleotide sequence-based technology; antisense drug discovery;  
target validation; ss.  
Synthetic.  
Homo sapiens.  
WO953101-A1.  
21-OCT-1999.  
13-APR-1999; 99WO-US008268.  
13-APR-1998; 98US-0081483P.  
28-APR-1998; 98US-00067638.  
(ISIS-) ISIS PHARM INC.  
Cowsett LM, Baker BF, Mcneil J, Freier SM, Sasmor HM, Brooks DG;  
Ohasi C, Wyatt JR, Borchers AH, Vickers TA;  
WPI; 1999-620446/53.  
Identifying compounds which modulate expression of nucleic acids, used to  
provide compounds having defined physical, chemical or bioactive  
properties, e.g. antisense activity.  
Example 21; Page 101; 264pp; English.  
A method has been developed of defining a set of compounds that modulate  
the expression of a target nucleic acid (tNA) sequence via binding of the  
compounds with the tNA sequence. The method comprises generating a  
library of virtual compounds in silico according to defined criteria, and  
evaluating in silico the binding of the virtual compounds with the tNA  
according to defined criteria. Also described are: (1) a method of  
defining a set of oligonucleotides (ONS) that modulate the expression of  
a tNA sequence via binding of the ONS with the tNA sequence comprising  
generating a library of virtual compounds in silico according to defined  
criteria, and evaluating in silico the binding of the virtual ONS with  
the tNA according to defined criteria; and (2) a method of defining a set  
of compounds that modulate the expression of a tNA sequence via binding  
of the compounds with the tNA. The methods can be used for the generation  
and identification of synthetic compounds having defined physical,  
chemical or bioactive properties. Information gathered from assays of  
such compounds is used to identify nucleic acid sequences that are  
tractable to a variety of nucleotide sequence-based technologies, e.g.  
antisense drug discovery and target validation. AAZ40852 to AAZ41220, and  
AAZ52701 to AAZ52706, represent sequences used in the exemplification of  
the present invention  
Sequence 18 BP; 0 A; 9 C; 0 G; 9 T; 0 U; 0 Other;  
Query Match 17.5%; Score 12.8; DB 1; Length 18;  
Best Local Similarity 87.5%; Pred. No. 4.5e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
927 TTTATCCCTCCTCTTC 942  
|||||  
1 TTTCTCTCTCCTCTTC 16  
RESULT 96  
AAZ22131  
AAZ22131 standard; DNA; 18 BP.  
AAZ22131;  
26-NOV-1999 (first entry)

XX Human c-IAP-2 mRNA inhibiting antisense oligo ISIS #23440.  
DE Cellular Inhibitor of Apoptosis-2; antisense; diagnostic; therapeutic;  
XX c-IAP-2; prophylaxis; infection; inflammation; tumor formation; ss.  
KW Synthetic.  
OS Homo sapiens.  
XX US958771-A.  
PN 28-SEP-1999.  
XX 03-DEC-1998; 98US-00205144.  
XX 03-DEC-1998; 98US-00205144.  
PR (ISIS-) ISIS PHARM INC.  
XX Bennett CF, Cowsett LM, Ackermann EJ;  
PI WPI; 1999-561046/47.  
DR Antisense compounds complementary to Cellular Inhibitor of Apoptosis-2  
XX useful for e.g. diagnostics, therapeutics, and as research reagents.  
PT Example 15; Col 39; 33pp; English.  
PS The invention provides antisense compounds of 8-30 nucleotides that  
XX inhibit the expression of human Cellular Inhibitor of Apoptosis-2 (c-IAP-  
CC 2). The antisense compounds may be used for diagnostics, therapeutics  
CC (for modulating the expression of c-IAP-2), prophylaxis (e.g. to prevent  
CC or delay infection, inflammation, or tumor formation), as research  
CC reagents (e.g. to distinguish between members of a biological pathway)  
CC and in kits. Sequences AAZ2103-142 represent phosphorothioate  
CC oligonucleotides used for antisense inhibition of cellular inhibitor of  
XX apoptosis-2  
SQ Sequence 18 BP; 0 A; 9 C; 0 G; 9 T; 0 U; 0 Other;  
Query Match 17.5%; Score 12.8; DB 1; Length 18;  
Best Local Similarity 87.5%; Pred. No. 4.5e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
927 TTTATCCCTCCTCTTC 942  
|||||  
1 TTTCTCTCTCCTCTTC 16  
RESULT 97  
ABK88473/c  
ID ABK88473 standard; DNA; 18 BP.  
XX AC  
XX ABK88473;  
XX 07-OCT-2002 (first entry)  
XX Human HP4 prostaglandin receptor RT-PCR primer #2.  
DE Human; ss; PCR; HP4; human placental clone number 4; EP2; primer;  
XX prostaglandin receptor; antiasthmatic; antiinflammatory;  
KW bronchopulmonary inflammation; asthma; inflammation;  
KW antisense gene therapy; reverse transcriptase PCR.  
XX Homo sapiens.  
OS US6395878-B1.  
PN 28-MAY-2002.  
XX 12-MAR-1999; 99US-00267423.  
XX 05-MAY-1994; 94US-00239431.



```
PR 05-FEB-1998; 98US-00019393.
XX (ALLR ) ALLERGAN SALES INC.
PA
PI Regan JW, Gil DW, Woodward DF;
XX WPI; 2002-572852/61.
XX
XX New full length human prostaglandin human placental clone member 4
PT polypeptide useful in the development of treatments for bronchopulmonary
PT inflammation and asthma, and for regulating inflammation.
XX
XX Claim 12; Col 10; 16pp; English.
XX
XX The invention relates to an isolated polypeptide comprising a full length
CC human prostaglandin (human placental clone number 4) HP4 receptor, where
CC the amino acid sequence of the receptor is encoded by nucleotide sequence
CC contained within an open reading frame of plasmid HS/HP4, American Type
CC Culture Collection (ATCC) accession number 97472. Also included are a
CC polypeptide comprising a fragment of HP4, where the fragment comprises an
CC amino acid sequence encoded by 18 consecutive nucleotides of a nucleotide
CC sequence region flanked by primers of appearing as ABK88470 and ABK88471
CC and the fragment binds an anti-HP4 antibody, and a composition comprising
CC the isolated fragment of the human prostaglandin HP4 receptor. The HP4
CC receptor (which has prostaglandin EP2 receptor pharmacological activity)
CC is useful for determining the specific processes mediated by HP4 receptor
CC and in the development of treatments for bronchopulmonary inflammation
CC and asthma, and in regulating inflammation. HP4 is also useful for
CC identifying compounds for utilising as therapeutic agents. HP4 is useful
CC in binding assays in particular for identifying HP4 receptor agonist and
CC antagonist. The HP4 fragment is useful in situ hybridisation and for
CC generating antibodies against HP4 receptor epitopes that allows
CC immunohisto-chemical localisation of the protein in cells, tissues, and
CC body fluids, and thus identifying a cell expressing the HP4 receptor
CC subtype. A composition comprising a fragment of HP4 polynucleotide is
CC useful for decreasing or preventing translation of human HP4
CC prostaglandin receptor (i.e. antisense gene therapy). The present
CC sequence is a reverse transcriptase (RT)-PCR primer used to amplify a
CC region of the HP4 prostaglandin receptor mRNA corresponding to the second
CC extracellular loop and seventh transmembrane domain
XX
SQ Sequence 18 BP; 7 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
Query Match 17.5%; Score 12.8; DB 1; Length 18;
Best Local Similarity 87.5%; Pred. No. 4.5e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 912 CTTTGGTCTTGCCCTT 927
DQ 17 CTTGGGCTTTGCCAT 2
RESULT 98
ABK15756/c
ID ABK15756 standard; DNA; 18 BP.
XX
XX ABK15756;
XX
XX 08-MAY-2002 (first entry)
XX
XX Prostaglandin receptor EP2 antisense PCR primer DNA sequence.
XX
XX Human; cyclooxygenase-2; COX-2; PCR; primer; sepsis; pancreatitis; burn;
XX trauma; blood aloss; penetrating injury; septic shock; pneumonia;
XX septicaemia; bacteraemia; urinary tract infection; wound infection;
XX drug reaction; systemic inflammatory response syndrome; PGE_2;
XX prostaglandin E_2; receptor; EP2; ss.
XX
XX Homo sapiens.
XX
XX US2002006915-A1.
XX
XX 17-JAN-2002.
```

```
XX 14-FEB-2001; 2001US-00782936.
XX
XX 15-FEB-2000; 2000US-0182524P.
XX
XX (STRO//) MACK STRONG V E.
XX (STAP//) STAPLETON P P.
XX (DALY//) DALY J M.
XX
XX Mack Strong VE, Stapleton PP, Daly JM;
XX WPI; 2002-179019/23.
XX
XX Treating a patient at risk for systemic inflammatory response syndrome
XX e.g. trauma involves administering cyclooxygenase-2 inhibitor or a drug.
XX
XX Example 5; Page 10; 39pp; English.
XX
XX The present invention relates to a new method of treating a patient at
XX risk for systemic inflammatory response syndrome. The method involves
XX administering a selective cyclooxygenase-2 inhibitor or a drug which
XX stimulates at least one prostaglandin E2 (PGE 2) receptor or a drug
XX which interferes with binding of PGE 2 to at least one of PGE 2
XX receptors. The invention can be used for treating a patient at risk for
XX systemic inflammatory response syndrome e.g. sepsis, pancreatitis, burns,
XX trauma, life threatening blood loss from penetrating injury, or a patient
XX who has undergone surgery, septic shock, infections such as pneumonia,
XX septicaemia, bacteraemia, urinary tract infection, wound infection or
XX drug reaction and can also be used for beneficial immune modulation. The
XX inhibitor or the drugs selectively modulate the immune response after
XX trauma, reduce the incidence of infectious complications and improve
XX survival after traumatic injury. The present nucleic acid sequence
XX represents the human prostaglandin receptor EP2 antisense PCR primer that
XX was used in the invention with the EP2 sense PCR primer (ABK15755) for
XX peripheral blood mononuclear cell RNA preparation
XX
SQ Sequence 18 BP; 7 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
Query Match 17.5%; Score 12.8; DB 1; Length 18;
Best Local Similarity 87.5%; Pred. No. 4.5e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 912 CTTTGGTCTTGCCCTT 927
DQ 17 CTTGGGCTTTGCCAT 2
RESULT 99
ABS57306/c
ID ABS57306 standard; DNA; 18 BP.
XX
XX ABS57306;
XX
XX 31-JAN-2003 (first entry)
XX
XX PCR primer #2 for DNA encoding human placental clone number 4 (HP4) .
XX
XX Human; EP prostaglandin receptor; human placental clone number 4; HP4;
XX adenylyate cyclase; chronic asthma; immunosuppression; antiasthmatic; PCR;
XX primer; ss.
XX
XX Homo sapiens.
XX
XX US2002128445-A1.
XX
XX 12-SEP-2002.
XX
XX 28-MAR-2002; 2002US-00108714.
XX
XX 05-MAY-1994; 94US-00239431.
XX 05-FEB-1998; 98US-00019393.
XX 12-MAR-1999; 99US-00267423.
XX
```

```

(UVAR-) UNIV ARIZONA STATE.
Regan JW, Gil DW, Woodward DF;
WPI; 2003-066913/06.
Novel isolated human prostaglandin HP4 receptor polypeptide encoded by
plasmid KS/HP4, useful to stimulate adenylate cyclase activity in
response to prostaglandins or to raise antibodies against HP4 receptor
epitopes.
Example 6; Page 5; 12pp; English.
The present invention relates to a gene encoding a novel human EP
prostaglandin receptor, referred to as human placental clone number 4
(HP4). Also described is a vector, KS/HP4 (pBluescript HP4 clone), used
for the expression of HP4 in eukaryotic cells. The HP4 receptor, when
expressed in eukaryotic cells, is capable of binding prostaglandins and
their analogues, and stimulating adenylate cyclase activity in response
to prostaglandins. The HP4 receptor is useful for studying the
pharmacology, cellular distribution, and expression of the HP4 receptor.
It is also useful as an antigen to raise antibodies against HP4 receptor
epitopes, in binding assays for identifying HP4 receptor agonists and
antagonists, and for screening compounds able to bind to the
prostaglandin HP4 receptor. A composition comprising an antisense agent
able to inhibit or prevent translation of the HP4 receptor in vivo is
useful for attenuating the effects of endogenous HP4 receptor agonists in
patients having conditions such as chronic asthma or immunosuppression,
and for treating the above conditions. The present sequence represents a
PCR primer for DNA encoding HP4
Sequence 18 BP; 7 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
Query Match 17.5%; Score 12.8; DB 1; Length 18;
Best Local Similarity 87.5%; Pred. No. 4.5e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
/ 912 CTTGGTCTTGGCTT 927
/ 17 CTTGGTCTTGGCAT 2
RESULT 100
AD60507
/ AAD60507 standard; DNA; 18 BP.
/ AAD60507;
/ 18-DEC-2003 (first entry)
/ Human c-IAP-2 antisense oligonucleotide #IS15 #23480.
/ Human; antisense; cellular inhibitor of apoptosis-2; c-IAP-2; cancer;
/ hyperproliferative condition; apoptosis inhibitor 2; autoimmune disease;
/ API-1; hIAP-1; MIRC; gene therapy; phosphorothioate; ss.
/ Homo sapiens.
/ Synthetic.
1 Key Location/Qualifiers
modified_base 1..18
/*tag= a
/mod_base= OTHER
/notes= "Phosphorothioate backbone; All cytidine residues
are 5-methylcytidines"
modified_base 1..4
/*tag= b
/mod_base= OTHER
/notes= "2'-methoxyethyl (2'-MOE) nucleotides"
modified_base 15..18
/*tag= c
/mod_base= OTHER
/notes= "2'-methoxyethyl (2'-MOE) nucleotides"

```

```

XX US2003083300-A1.
XX 01-MAY-2003.
XX 16-JUL-2002; 2002US-00197290.
XX 23-SEP-1999; 99WO-US022083.
XX 04-OCT-2001; 2001US-00857299.
XX (BENN/) BENNETT C F.
XX (ACKE/) ACKERMANN E J.
XX (COWS/) COWSERT L M.
XX Bennett CF, Ackermann EJ, Cowsert LM;
XX WPI; 2003-755119/71.
XX New antisense compound, preferably an oligonucleotide, for inhibiting
XX expression of human Cellular Inhibitor of Apoptosis-2 in human cells or
XX tissues, and for treating diseases, such as cancer or an autoimmune
XX disease.
XX Example 16; Page 22; 34pp; English.
XX The invention relates to antisense compounds targeted to a nucleic acid
XX encoding human cellular inhibitor of apoptosis-2 (also known as c-IAP-2,
XX apoptosis inhibitor 2, API-1, hIAP-1 and MIRC) to inhibit its expression.
XX Antisense compounds of the invention are used to induce apoptosis in
XX human cells or tissues to treat diseases or conditions associated with
XX insufficient apoptosis. They are used to treat diseases or conditions
XX associated with c-IAP-2 such as hyperproliferative conditions especially
XX cancer or autoimmune diseases. The invention is also useful in antisense
XX gene therapy. The present sequence is an antisense oligonucleotide
XX targeted to human c-IAP-2 DNA
XX Sequence 18 BP; 0 A; 9 C; 0 G; 9 T; 0 U; 0 Other;
SQ Query Match 17.5%; Score 12.8; DB 1; Length 18;
Best Local Similarity 87.5%; Pred. No. 4.5e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 927 TTTATCCCTCCCTTC 942
Db 1 TTTCTCTCTCTTC 16
RESULT 101
AAZ75939/c
ID AAZ75939 standard; DNA; 19 BP.
XX AAZ75939;
XX 10-SEP-2001 (first entry)
XX Human biallelic marker downstream amplification primer SEQ ID NO:10295.
XX Human genome; biallelic marker; high density disequilibrium map;
XX genomic map; haplotype; phenotype; polymorphic base; genotyping;
XX haplotyping; hybridisation; identification; characterisation;
XX amplification; single nucleotide polymorphism; SNP; PCR primer;
XX diagnosis; ss.
XX Homo sapiens.
XX WO9954500-A2.
XX 28-OCT-1999.
XX 21-APR-1999; 99WO-IB000822.
XX 21-APR-1998; 98US-0082614P.
XX 23-NOV-1998; 98US-0109732P.

```

```

XX PA (GSET ) GENSET.
XX PI Cohen D, Blumenfeld M, Chumakov I;
XX DR WPI; 2000-013267/01.
XX
XX Novel biallelic markers used to construct a high density disequilibrium
XX map of the human genome.
XX
XX Claim 9; Page 2425; 2745pp; English.
XX
XX AA265654 to AA269578 represent human biallelic markers from the present
XX invention, which contain a polymorphic base at position 24 of their
XX nucleotide sequences. AA269579 to AA277440 represent amplification
XX primers for the biallelic markers. The biallelic markers of the invention
XX have a variety of uses: they can be used for high density mapping of the
XX human genome, and in complex association studies and haplotyping studies
XX which are useful in determining the genetic basis for disease states.
XX Compositions and methods of the invention can also be useful for the
XX identification of the targets for the development of pharmaceutical
XX agents and diagnostic methods, as well as the characterization of the
XX differential efficacious responses to and side effects from
XX pharmaceutical agents acting on a disease as well as other treatment.
XX N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
XX 3367, are not actually given a sequence in the Sequence Listing from the
XX present invention
XX
XX Sequence 19 BP; 8 A; 6 C; 3 G; 2 T; 0 U; 0 Other;
SQ
Query Match 17.5%; Score 12.8; DB 1; Length 19;
Best Local Similarity 87.5%; Pred. No. 4.6e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

CY 909 TTTCTTTGGTCTTGGC 924
DB 18 TTTCTTTGGTCTTGGC 3

RESULT 102
AAF49432
ID AAF49432 standard; DNA; 15 BP.
AC AAF49432;
XX
XX 30-MAR-2001 (first entry)
XX
XX IGF-I oligonucleotide #392.
XX
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
XX hyperneovascular condition; hyperplasia; kidney disease;
XX neovascular condition of the retina; ss.
XX
XX Homo sapiens.
XX
XX WO200078341-A1.
XX
XX 28-DEC-2000.
XX
XX 21-JUN-2000; 2000WO-AU000693.
XX
XX 21-JUN-1999; 99US-0140345P.
XX
XX (MURD-) MURDOCH CHILDRENS RES INST.
XX
XX Wraight CJ, Werther GA, Edmondson SR;
XX
XX WPI; 2001-041421/05.

```

```

XX
XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
XX inhibits or reduces growth factor mediated cell proliferation and/or
XX inflammation.
XX
XX Example 8; Page 63; 201pp; English.
XX
XX The present invention relates to a method for ameliorating the effects of
XX skin disorders. The method comprises contacting the skin with an
XX antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
XX receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
XX inhibiting or reducing growth factor mediated cell proliferation,
XX inflammation and/or other disorders. The present sequence is an
XX oligonucleotide which can be used to design the antisense
XX oligonucleotides of the present invention (see AAF45151 and AAF45153-
XX F45161). The method is useful for ameliorating the effects of psoriasis,
XX ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis,
XX neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
XX hyperneovascular condition such as a neovascular condition of the retina,
XX brain or skin, growth factor-mediated malignancies, other sclerotic
XX disease, kidney disease, hyperproliferation of the inside of blood
XX vessels or any other hyperplasia
XX
XX Sequence 15 BP; 1 A; 6 C; 3 G; 5 T; 0 U; 0 Other;
SQ
Query Match 17.0%; Score 12.4; DB 1; Length 15;
Best Local Similarity 92.9%; Pred. No. 4.6e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 899 CCCCTGGTCATTTTC 912
DB 1 CCCCTGGTCATTTTC 14

RESULT 103
AAF49431
ID AAF49431 standard; DNA; 15 BP.
AC AAF49431;
XX
XX 30-MAR-2001 (first entry)
XX
XX IGF-I oligonucleotide #391.
XX
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
XX hyperneovascular condition; hyperplasia; kidney disease;
XX neovascular condition of the retina; ss.
XX
XX Homo sapiens.
XX
XX WO200078341-A1.
XX
XX 28-DEC-2000.
XX
XX 21-JUN-2000; 2000WO-AU000693.
XX
XX 21-JUN-1999; 99US-0140345P.
XX
XX (MURD-) MURDOCH CHILDRENS RES INST.
XX
XX Wraight CJ, Werther GA, Edmondson SR;
XX
XX WPI; 2001-041421/05.
XX
XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
XX inhibits or reduces growth factor mediated cell proliferation and/or
XX

```

```

1 inflammation.
2
3 Example 8; Page 63; 201pp; English.
4
5 The present invention relates to a method for ameliorating the effects of
6 skin disorders. The method comprises contacting the skin with an
7 antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
8 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
9 inhibiting or reducing growth factor mediated cell proliferation,
10 inflammation and/or other disorders. The present sequence is an
11 oligonucleotide which can be used to design the antisense
12 oligonucleotides of the present invention (see AAF45151 and AAF45153-
13 F45161). The method is useful for ameliorating the effects of psoriasis,
14 ichthyosis, pityriasis, ruba, pilaris, seborrheoa, keloids, keratosis,
15 neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
16 hyperneovascular condition such as a neovascular condition of the retina,
17 brain or skin, growth factor-mediated malignancies, other sclerotic
18 disease, kidney disease, hyperproliferation of the inside of blood
19 vessels or any other hyperplasia
20
21 Sequence 15 BP; 1 A; 6 C; 3 G; 5 T; 0 U; 0 Other;
22
23 Query Match 17.0%; Score 12.4; DB 1; Length 15;
24 Best Local Similarity 92.9%; Pred. No. 4.6e+02;
25 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
26
27 899 CCTGTCATTTTC 912
28 |||||
29 2 CCTGTCATCTTC 15
30
31 RESULT 104
32 3V83098/c
33 ABV83098 standard; DNA; 17 BP.
34
35 ABV83098;
36
37 03-JAN-2003 (first entry)
38
39 Human HTPL scanning oligonucleotide SEQ ID 4344.
40
41 Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
42 human testis expressed Patched like protein; testis; adrenal; liver;
43 male germ cell development; bone marrow; brain; kidney; lung; placenta;
44 prostate; skeletal muscle; colon; male infertility; cancer; ss.
45
46 Homo sapiens.
47
48 EP1229046-A2.
49
50 07-AUG-2002.
51
52 28-JAN-2002; 2002EP-00001167.
53
54 30-JAN-2001; 2001WO-US000663.
55 30-JAN-2001; 2001WO-US000664.
56 30-JAN-2001; 2001WO-US000665.
57 30-JAN-2001; 2001WO-US000667.
58 30-JAN-2001; 2001WO-US000668.
59 30-JAN-2001; 2001WO-US000669.
60 23-MAY-2001; 2001US-00864761.
61 09-OCT-2001; 2001US-0327898P.
62
63 (AEOM-) AEOMICA INC.
64
65 Zhan J;
66
67 WPI; 2002-676582/73.
68
69 Novel isolated human testis expressed Patched like protein (HTPL), useful
70 for identifying agonist and antagonist and specific binding partners, and
71 for treating subjects having defects in HTPL.
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000

```

PT for treating subjects having defects in HTPL.  
 XX Example 2; Page 633; 718pp; English.  
 XX  
 CC The present invention relates to human testis expressed Patched like  
 CC protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL  
 CC has two isoforms, with a few single base pair differences between the  
 CC two. One of the single base pair changes introduces a premature stop  
 CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL  
 CC shares an overall structure organisation with the Patched protein. The  
 CC shared structural features strongly imply that HTPL plays a role similar  
 CC to that of Patched, and is a potential tumour suppressor. HTPL is  
 CC important in regulating male germ cell development, and the HTPL gene was  
 CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are  
 CC useful for diagnosing a disorder caused by mutation in HTPL, and in  
 CC therapy and manufacture of a medicament for treatment or prevention of  
 CC such disorder associated with decreased expression or activity of human  
 CC HTPL. Such disorders include disorders of testis, or adrenal, adult and  
 CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,  
 CC skeletal muscle or colon function. HTPL proteins and nucleic acids are  
 CC clinically useful diagnostic markers and potential therapeutic agents for  
 CC male infertility and cancer. The present oligonucleotide was used in an  
 CC example from the invention  
 XX  
 SQ Sequence 17 BP; 8 A; 4 C; 2 G; 3 T; 0 U; 0 Other;  
 Query Match 17.0%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 914 TTGGTCCTTTGCCTT 927  
 Db 15 TTGGTCCTTTGACTT 2  
 RESULT 106  
 ABT36385  
 ID ABT36385 standard; DNA; 17 BP.  
 XX  
 AC ABT36385;  
 XX  
 XX  
 CT 12-JUN-2003 (first entry)  
 XX  
 XX Tumour suppression related human fukutin oligo SEQ ID No 2022.  
 XX  
 KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;  
 KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;  
 KW schizophrenia; protein chip; gene therapy; tumour suppression;  
 KW human fukutin; ds.  
 XX  
 OS Homo sapiens.  
 XX  
 FN WO2003025175-A2.  
 XX  
 FD 27-MAR-2003.  
 XX  
 FF 17-SEP-2002; 2002WO-IB004208.  
 XX  
 FR 17-SEP-2001; 2001FR-00011978.  
 XX  
 XX (MOLE-) MOLECULAR ENGINES LAB.  
 FA  
 PI Telerman A, Amson R, Tuijnder M;  
 XX  
 DR WPI; 2003-313353/30.  
 XX  
 XX New isolated nucleic acid, useful for treating viral diseases associated  
 PT with tumors and cell degeneration, also related polypeptides, antibodies  
 PT and transfected cells.  
 PS Disclosure; Page 269; 720pp; French.  
 XX  
 XX The invention relates to a novel isolated 17 mer nucleic acid sequence,

CC given in the specification, a sequence containing at least 15 consecutive  
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal  
 CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that  
 CC hybridizes to them under highly stringent conditions, or the complement  
 CC of any of them, or the corresponding RNA. The novel isolated nucleic  
 CC acids of the invention are useful as probes and primers for detecting,  
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one  
 CC component of a gene chip, in vitro as (anti)sense reagents, and for  
 CC production of recombinant polypeptides. Any of the nucleic acids,  
 CC polypeptides, vectors containing the nucleic acids, cells containing the  
 CC vector or antibodies directed against the polypeptides are useful for  
 CC preparation of pharmaceuticals for prevention and/or treatment of viral  
 CC diseases that are characterised by development of tumours or cell  
 CC degeneration, specifically cancer but also Alzheimer's disease and  
 CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in  
 CC patient samples is useful for diagnosis and/or prognosis of these  
 CC diseases. The polypeptides can also be used to generate antibodies, and  
 CC both the polypeptide and antibodies are useful as components of protein  
 CC chips. The nucleic acid sequences of the invention can be used in gene  
 CC therapy. This polynucleotide sequence represents a tumour suppression  
 CC related human fukutin oligonucleotide of the invention  
 XX  
 SQ Sequence 17 BP; 1 A; 2 C; 4 G; 10 T; 0 U; 0 Other;  
 Query Match 17.0%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 911 TCTTTGGTCCTTTC 924  
 Db 3 TCTTTGGTCCTTTC 16  
 RESULT 107  
 ACD50661  
 ID ACD50661 standard; RNA; 17 BP.  
 XX  
 AC ACD50661;  
 XX  
 XX 23-SEP-2003 (first entry)  
 XX  
 XX HBV hammerhead ribozyme substrate sequence #178.  
 XX  
 KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
 KW RNA stability; RNA expression; RNA synthesis; antisense;  
 KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;  
 KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;  
 KW HBV reverse transcriptase; Enhancer I region; viral replication;  
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
 KW virucide; antiinflammatory; substrate; ss.  
 XX  
 OS Hepatitis B virus.  
 XX  
 FN WO200281494-A1.  
 XX  
 PD 17-OCT-2002.  
 XX  
 PF 26-MAR-2002; 2002WO-US009187.  
 XX  
 XX 26-MAR-2001; 2001US-00817879.  
 PR  
 PR 08-JUN-2001; 2001US-00877478.  
 PR  
 PR 08-JUN-2001; 2001US-0296876P.  
 PR  
 PR 24-OCT-2001; 2001US-0335059P.  
 PR  
 PR 05-DEC-2001; 2001US-0337055P.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA  
 PA (BLAT/) BLATT L.  
 PA (MACE/) MACEJAK D.  
 PA (MCSW/) MCSWISSEN J.  
 PA (MORR/) MORRISSEY D.  
 PA (PAVC/) PAVCO P.  
 PA (LEEP/) LEE P.

DR WPI; 2003-333167/31.

XX New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

XX Disclosure; Page 562; 738pp; French.

XX The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia.

XX Sequence 17 BP; 1 A; 3 C; 3 G; 10 T; 0 U; 0 Other;

XX Query Match 17.0%; Score 12.4; DB 1; Length 17;

XX Best Local Similarity 92.9%; Pred. No. 5e+02; Mismatches 0; Gaps 0;

XX Matches 13; Conservative 0; Indels 1;

Qy 911 TCTTGTCTCTTCG 924

Db 3 TCTTGTCTCTTCG 16

RESULT 109

ADB42368

ID ADB42368 standard; DNA; 17 BP.

XX AC ADB42368;

XX 18-DEC-2003 (revised)

DT 04-DEC-2003 (first entry)

XX Tumour suppression/reversion associated nucleotide #2691.

XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;

XX primer; probe; tumour suppression; tumour reversion; apoptosis;

XX virus resistance; transgenic animals; Alzheimer's disease; schizophrenia; diagnosis.

XX Homo sapiens.

XX WO2003040369-A2.

XX 15-MAY-2003.

XX 17-SEP-2002; 2002WO-IB004219.

XX 17-SEP-2001; 2001FR-00011981.

XX (MOLE-) MOLECULAR ENGINES LAB.

XX Telerman A, Amson R, Tuijnder M;

XX WPI; 2003-441574/41.

XX New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.

XX Disclosure; Page 346; 771pp; French.

XX The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the

DRAP/) DRAPER K.

(ROBE/) ROBERTS E.

Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;

Draper K, Roberts E;

WPI; 2003-229207/22.

Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus infection.

Example 1; Page 139; 387pp; English.

The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes, inozymes, zinzymes, amberyzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase and/or HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HBV ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberyzyme sequences disclosed in the present invention

Sequence 17 BP; 2 A; 4 C; 1 G; 0 T; 10 U; 0 Other;

Query Match 17.0%; Score 12.4; DB 1; Length 17;

Best Local Similarity 28.6%; Pred. No. 5e+02;

Matches 4; Conservative 9; Mismatches 1; Indels 0; Gaps 0;

907 ATTTCCTTGTCTCT 920

4 AUUUUUUUUUUU 17

RESULT 108

CC67296

ACC67296 standard; DNA; 17 BP.

ACC67296;

01-JUL-2003 (first entry)

Marine oligonucleotide associated with tumour suppression, SEQ ID 4543.

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;

tumour suppression; tumour reversion; apoptosis; virus resistance;

viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;

schizophrenia; ss.

Mus musculus.

WO2003025176-A2.

27-MAR-2003.

17-SEP-2002; 2002WO-IB004210.

17-SEP-2001; 2001FR-00011979.

(MOLE-) MOLECULAR ENGINES LAB.

Telerman A, Amson R, Tuijnder M;

DR WPI; 2003-333167/31.

XX New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

XX Disclosure; Page 562; 738pp; French.

XX The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia.

XX Sequence 17 BP; 1 A; 3 C; 3 G; 10 T; 0 U; 0 Other;

XX Query Match 17.0%; Score 12.4; DB 1; Length 17;

XX Best Local Similarity 92.9%; Pred. No. 5e+02; Mismatches 0; Gaps 0;

XX Matches 13; Conservative 0; Indels 1;

Qy 911 TCTTGTCTCTTCG 924

Db 3 TCTTGTCTCTTCG 16

RESULT 109

ADB42368

ID ADB42368 standard; DNA; 17 BP.

XX AC ADB42368;

XX 18-DEC-2003 (revised)

DT 04-DEC-2003 (first entry)

XX Tumour suppression/reversion associated nucleotide #2691.

XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;

XX primer; probe; tumour suppression; tumour reversion; apoptosis;

XX virus resistance; transgenic animals; Alzheimer's disease; schizophrenia; diagnosis.

XX Homo sapiens.

XX WO2003040369-A2.

XX 15-MAY-2003.

XX 17-SEP-2002; 2002WO-IB004219.

XX 17-SEP-2001; 2001FR-00011981.

XX (MOLE-) MOLECULAR ENGINES LAB.

XX Telerman A, Amson R, Tuijnder M;

XX WPI; 2003-441574/41.

XX New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.

XX Disclosure; Page 346; 771pp; French.

XX The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the

DR WPI; 2003-333167/31.

XX New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

XX Disclosure; Page 562; 738pp; French.

XX The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia.

XX Sequence 17 BP; 1 A; 3 C; 3 G; 10 T; 0 U; 0 Other;

XX Query Match 17.0%; Score 12.4; DB 1; Length 17;

XX Best Local Similarity 92.9%; Pred. No. 5e+02; Mismatches 0; Gaps 0;

XX Matches 13; Conservative 0; Indels 1;

Qy 911 TCTTGTCTCTTCG 924

Db 3 TCTTGTCTCTTCG 16

RESULT 109

ADB42368

ID ADB42368 standard; DNA; 17 BP.

XX AC ADB42368;

XX 18-DEC-2003 (revised)

DT 04-DEC-2003 (first entry)

XX Tumour suppression/reversion associated nucleotide #2691.

XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;

XX primer; probe; tumour suppression; tumour reversion; apoptosis;

XX virus resistance; transgenic animals; Alzheimer's disease; schizophrenia; diagnosis.

XX Homo sapiens.

XX WO2003040369-A2.

XX 15-MAY-2003.

XX 17-SEP-2002; 2002WO-IB004219.

XX 17-SEP-2001; 2001FR-00011981.

XX (MOLE-) MOLECULAR ENGINES LAB.

XX Telerman A, Amson R, Tuijnder M;

XX WPI; 2003-441574/41.

XX New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.

XX Disclosure; Page 346; 771pp; French.

XX The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the

DR WPI; 2003-333167/31.

XX New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

XX Disclosure; Page 562; 738pp; French.

XX The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia.

XX Sequence 17 BP; 1 A; 3 C; 3 G; 10 T; 0 U; 0 Other;

XX Query Match 17.0%; Score 12.4; DB 1; Length 17;

XX Best Local Similarity 92.9%; Pred. No. 5e+02; Mismatches 0; Gaps 0;

XX Matches 13; Conservative 0; Indels 1;

Qy 911 TCTTGTCTCTTCG 924

Db 3 TCTTGTCTCTTCG 16

RESULT 109

ADB42368

ID ADB42368 standard; DNA; 17 BP.

XX AC ADB42368;

XX 18-DEC-2003 (revised)

DT 04-DEC-2003 (first entry)

XX Tumour suppression/reversion associated nucleotide #2691.

XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;

XX primer; probe; tumour suppression; tumour reversion; apoptosis;

XX virus resistance; transgenic animals; Alzheimer's disease; schizophrenia; diagnosis.

XX Homo sapiens.

XX WO2003040369-A2.

XX 15-MAY-2003.

XX 17-SEP-2002; 2002WO-IB004219.

XX 17-SEP-2001; 2001FR-00011981.

XX (MOLE-) MOLECULAR ENGINES LAB.

XX Telerman A, Amson R, Tuijnder M;

XX WPI; 2003-441574/41.

XX New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.

XX Disclosure; Page 346; 771pp; French.

XX The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the

DR WPI; 2003-333167/31.

XX New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

XX Disclosure; Page 562; 738pp; French.

XX The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia.

XX Sequence 17 BP; 1 A; 3 C; 3 G; 10 T; 0 U; 0 Other;

XX Query Match 17.0%; Score 12.4; DB 1; Length 17;

XX Best Local Similarity 92.9%; Pred. No. 5e+02; Mismatches 0; Gaps 0;

XX Matches 13; Conservative 0; Indels 1;

Qy 911 TCTTGTCTCTTCG 924

Db 3 TCTTGTCTCTTCG 16

RESULT 109

ADB42368

ID ADB42368 standard; DNA; 17 BP.

XX AC ADB42368;

XX 18-DEC-2003 (revised)

DT 04-DEC-2003 (first entry)

XX Tumour suppression/reversion associated nucleotide #2691.

XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;

XX primer; probe; tumour suppression; tumour reversion; apoptosis;

XX virus resistance; transgenic animals; Alzheimer's disease; schizophrenia; diagnosis.

XX Homo sapiens.

XX WO2003040369-A2.

XX 15-MAY-2003.

XX 17-SEP-2002; 2002WO-IB004219.

XX 17-SEP-2001; 2001FR-00011981.

XX (MOLE-) MOLECULAR ENGINES LAB.

XX Telerman A, Amson R, Tuijnder M;

XX WPI; 2003-441574/41.

XX New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.

XX Disclosure; Page 346; 771pp; French.

XX The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the

DR WPI; 2003-333167/31.

XX New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

XX Disclosure; Page 562; 738pp; French.

XX The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia.

XX Sequence 17 BP; 1 A; 3 C; 3 G; 10 T; 0 U; 0 Other;

XX Query Match 17.0%; Score 12.4; DB 1; Length 17;

XX Best Local Similarity 92.9%; Pred. No. 5e+02; Mismatches 0; Gaps 0;

XX Matches 13; Conservative 0; Indels 1;

Qy 911 TCTTGTCTCTTCG 924

Db 3 TCTTGTCTCTTCG 16

RESULT 109

ADB42368

ID ADB42368 standard; DNA; 17 BP.

XX AC ADB42368;

XX 18-DEC-2003 (revised)

DT 04-DEC-2003 (first entry)

XX Tumour suppression/reversion associated nucleotide #2691.

XX cytostatic; antiviral; neuroprotective;

CC nucleotides. The nucleotides are used as probes or primers for detecting,  
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro  
 CC sense and antisense sequences, of nucleotides involved in tumour  
 CC suppression or reversion, apoptosis and or viral resistance, to produce  
 CC recombinant polypeptides, and to prepare transgenic animals, as  
 CC experimental models. The nucleotides (also vectors containing them and  
 CC cells containing the vectors), the encoded polypeptides and antibodies  
 CC (Ab) against the polypeptide are useful for prevention and/or treatment  
 CC of viral infections or diseases characterized by development of tumours  
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).  
 CC Analysis of the expression of the nucleotides can be used for diagnosis  
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can  
 CC also be used to screen for their specific interactive molecules,  
 CC potentially useful for treating diseases associated with abnormal  
 CC expression of the nucleotides.

XX  
 SQ Sequence 17 BP; 3 A; 9 C; 1 G; 4 T; 0 U; 0 Other;  
 Query Match 17.0%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5e+02; Indels 0; Gaps 0;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 930 ATCCCTCTCTTCA 943  
 DQ 2 ATCCCACTCTTCA 15  
 ||||| |||||

RESULT 110  
 ADB40322  
 ID ADB40322 standard; DNA; 17 BP.  
 XX  
 AC ADB40322;  
 XX  
 DT 18-DEC-2003 (revised)  
 DT 04-DEC-2003 (first entry)  
 XX  
 DE Tumour suppression/reversion associated nucleotide #645.  
 XX  
 KW diagnosis.  
 OS Homo sapiens.  
 XX  
 FN WO2003040369-A2.  
 XX  
 PD 15-MAY-2003.  
 XX  
 PF 17-SEP-2002; 2002WO-IB004219.  
 XX  
 PR 17-SEP-2001; 2001FR-00011981.  
 XX  
 PA (MOLE-) MOLECULAR ENGINES LAB.  
 XX  
 PI Telerman A, Amson R, Tuijnder M;  
 XX  
 DR WPI; 2003-441574/41.  
 XX  
 PT New nucleic acid encoding human prostate membrane-specific antigen,  
 PT useful e.g. for treatment of tumors and viral infection, also related  
 PT polypeptide and antibodies.  
 XX  
 PS Disclosure; Page 107; 77lpp; French.  
 XX  
 CC The invention relates to the isolation of 6327 nucleotide sequences,  
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a  
 CC sequence having at least 80% identity, after optimal alignment, with the  
 CC nucleotides, a sequence that hybridizes under stringent conditions with  
 CC the nucleotides, or the complement, or corresponding RNA, of the  
 CC nucleotides. The nucleotides are used as probes or primers for detecting,  
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro  
 CC sense and antisense sequences, of nucleotides involved in tumour  
 CC suppression or reversion, apoptosis and or viral resistance, to produce  
 CC recombinant polypeptides, and to prepare transgenic animals, as  
 CC experimental models. The nucleotides (also vectors containing them and

CC cells containing the vectors), the encoded polypeptides and antibodies  
 CC (Ab) against the polypeptide are useful for prevention and/or treatment  
 CC of viral infections or diseases characterized by development of tumours  
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).  
 CC Analysis of the expression of the nucleotides can be used for diagnosis  
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can  
 CC also be used to screen for their specific interactive molecules,  
 CC potentially useful for treating diseases associated with abnormal  
 CC expression of the nucleotides.

XX  
 SQ Sequence 17 BP; 2 A; 4 C; 3 G; 8 T; 0 U; 0 Other;  
 Query Match 17.0%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5e+02; Indels 0; Gaps 0;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 903 GGCATTTTCTTTG 916  
 DB 1 GATCATTTCTTTG 14  
 ||||| |||||

RESULT 111  
 ADB40653/C  
 ID ADB40653 standard; DNA; 17 BP.  
 XX  
 AC ADB40653;  
 XX  
 DT 18-DEC-2003 (revised)  
 DT 04-DEC-2003 (first entry)  
 XX  
 DE Tumour suppression/reversion associated nucleotide #976.  
 XX  
 KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;  
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;  
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;  
 KW diagnosis.  
 XX  
 OS Homo sapiens.  
 XX  
 FN WO2003040369-A2.  
 XX  
 PD 15-MAY-2003.  
 XX  
 PF 17-SEP-2002; 2002WO-IB004219.  
 XX  
 PR 17-SEP-2001; 2001FR-00011981.  
 XX  
 PA (MOLE-) MOLECULAR ENGINES LAB.  
 XX  
 PI Telerman A, Amson R, Tuijnder M;  
 XX  
 DR WPI; 2003-441574/41.  
 XX  
 PT New nucleic acid encoding human prostate membrane-specific antigen,  
 PT useful e.g. for treatment of tumors and viral infection, also related  
 PT polypeptide and antibodies.  
 XX  
 PS Disclosure; Page 146; 77lpp; French.  
 XX  
 CC The invention relates to the isolation of 6327 nucleotide sequences,  
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a  
 CC sequence having at least 80% identity, after optimal alignment, with the  
 CC nucleotides, a sequence that hybridizes under stringent conditions with  
 CC the nucleotides, or the complement, or corresponding RNA, of the  
 CC nucleotides. The nucleotides are used as probes or primers for detecting,  
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro  
 CC sense and antisense sequences, of nucleotides involved in tumour  
 CC suppression or reversion, apoptosis and or viral resistance, to produce  
 CC recombinant polypeptides, and to prepare transgenic animals, as  
 CC experimental models. The nucleotides (also vectors containing them and  
 CC cells containing the vectors), the encoded polypeptides and antibodies  
 CC (Ab) against the polypeptide are useful for prevention and/or treatment  
 CC of viral infections or diseases characterized by development of tumours

or cell degeneration (e.g. Alzheimer's disease or schizophrenia).  
Analysis of the expression of the nucleotides can be used for diagnosis  
and/or prognosis of these diseases. The nucleotides and polypeptides can  
also be used to screen for their specific interactive molecules,  
potentially useful for treating diseases associated with abnormal  
expression of the nucleotides.

Sequence 17 BP; 8 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 17.0%; Score 12.4; DB 1; Length 17;

Best Local Similarity 92.9%; Pred. No. 5e+02; Mismatches 0; Indels 0; Gaps 0;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

904 GTCAATTTCTTTGG 917

17 GACATTTCTTTGG 4

RESULT 112

9B4348

ADB44348 standard; DNA; 17 BP.

ADB44348;

18-DEC-2003 (first entry)

Tumour suppression/reversion associated nucleotide #4671.

cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;  
primer; probe; tumour suppression; tumour reversion; apoptosis;  
virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;  
diagnosis.

Homo sapiens.

WO2003040369-A2.

15-MAY-2003.

17-SEP-2002; 2002WO-1B004219.

17-SEP-2001; 2001PR-00011981.

(MOLE-) MOLECULAR ENGINES LAB.

Telerman A, Amson R, Tuijnder M;

WPI; 2003-441574/41.

New nucleic acid encoding human prostate membrane-specific antigen,  
useful e.g. for treatment of tumors and viral infection, also related  
polypeptide and antibodies.

Disclosure; Page 578; 77lpp; French.

The invention relates to the isolation of 6327 nucleotide sequences,  
fragments of at least 15 consecutive nucleotides of these nucleotides, a  
sequence having at least 80% identity, after optimal alignment, with the  
nucleotides, a sequence that hybridizes under stringent conditions with  
the nucleotides, or the complement, or corresponding RNA, of the  
nucleotides. The nucleotides are used as probes or primers for detecting,  
identifying, quantifying and/or amplifying nucleic acids, as in vitro  
sense and antisense sequences, of nucleotides involved in tumour  
suppression or reversion, apoptosis and or viral resistance, to produce  
recombinant polypeptides, and to prepare transgenic animals, as  
experimental models. The nucleotides (also vectors containing them and  
cells containing the vectors), the encoded polypeptides and antibodies  
(Ab) against the polypeptide are useful for prevention and/or treatment  
of viral infections or diseases characterized by development of tumours  
or cell degeneration (e.g. Alzheimer's disease or schizophrenia).  
Analysis of the expression of the nucleotides can be used for diagnosis  
and/or prognosis of these diseases. The nucleotides and polypeptides can  
also be used to screen for their specific interactive molecules,

CC potentially useful for treating diseases associated with abnormal  
expression of the nucleotides.

XX Sequence 17 BP; 1 A; 2 C; 4 G; 10 T; 0 U; 0 Other;

Query Match 17.0%; Score 12.4; DB 1; Length 17;

Best Local Similarity 92.9%; Pred. No. 5e+02;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 911 TCTTTGGTCTTTGC 924

3 TCTTTGGTCTTTGC 16

RESULT 113

AAT09038/c

ID AAT09038 standard; DNA; 18 BP.

XX AC AAT09038;

XX 28-AUG-1996 (first entry)

XX Arabidopsis thaliana EIN2 (ethylene insensitive) locus primer PE9.

XX EIN2; ethylene insensitive; transformed plant; disease tolerance;

XX ethylene insensitivity; primer; ss.

XX Synthetic.

XX WO9535318-A1.

XX 28-DEC-1995.

XX 15-JUN-1995; 95WO-US007744.

XX 17-JUN-1994; 94US-00261822.

XX (UYPE-) UNIV PENNSYLVANIA.

XX Ecker J, Rothenberg M, Lehman A, Roman G;

XX WPI; 1996-058366/06.

XX Plant sequences for ethylene insensitive loci and hook-less 1 allele(s) -  
confer disease tolerance and ethylene insensitivity when transformed into  
plants.

XX Example 2; Page 30; 144pp; English.

XX The present sequence is a primer for the A. thaliana EIN2 (ethylene  
insensitive) locus. When transformed into plants EIN2 genomic DNA, or  
cDNA sequences (obtd. from the EIN2 locus) confer disease tolerance and  
ethylene insensitivity, with minimal injury or reduction in the harvest  
yield of saleable material. The plants with disease tolerance may have  
extensive levels of infection, but little necrosis and few or no lesions.  
XX They may also have reduced necrotic and water soaking responses, and  
chlorophyll loss may be virtually absent

XX Sequence 18 BP; 6 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 17.0%; Score 12.4; DB 1; Length 18;

Best Local Similarity 92.9%; Pred. No. 5.2e+02;

Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 933 CCTCCTCTTCATTG 946

17 CCTCCTCTTCATTG 4

RESULT 114

AAX01714/c

ID AAX01714 standard; DNA; 18 BP.

XX



AC AAX01714;  
XX  
ET 08-JUN-1999 (first entry)  
XX  
XX Human anti-angiogenic 16K hPRL DNA fragment #1.  
XX  
XX Human; anti-angiogenic; prolactin; placental lactogen; hPL; angiogenesis;  
XX growth hormone; hGH; hGH-V; capillary endothelial cell proliferation;  
XX placental vascularisation; pregnancy; treatment; angiogenic disease;  
XX tumour; inhibitor; malignant; angiofibroma; arteriovenous malformation;  
XX arthritis; atherosclerotic plaques; corneal graft neovascularisation;  
XX wound healing; proliferative retinopathy; macular degeneration; trachoma;  
XX granulation; glaucoma; ocular; uveitis; fracture; Osler-Weber syndrome;  
XX psoriasis; fibroplasia; scleroderma; Kaposi's sarcoma; vascular adhesion;  
XX ulcer; leukaemia; reproductive disorder; contraceptive agent;  
XX gene therapy; pre-eclampsia; intrauterine growth retardation;  
XX placental dysfunction; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO9851323-A1.  
XX  
XX 19-NOV-1998.  
XX  
XX 12-MAY-1998; 98WO-US009691.  
XX  
XX 13-MAY-1997; 97US-0046394P.  
XX  
XX (REGC) UNIV CALIFORNIA.  
XX  
XX Weiner RI, Martial JA, Struman I, Taylor R;  
XX  
XX WPI; 1999-045192/04.  
XX P-PSDB; AAW92268.  
XX  
XX New anti-angiogenic peptides - comprise N-terminal fragments of human  
XX placental lactogen, human growth hormone, growth hormone variant or human  
XX prolactin.  
XX  
XX Example 5; Page 55; 87pp; English.  
XX  
XX This invention describes novel human anti-angiogenic peptides derived  
XX from 10 to 150 consecutive amino acids selected from the N-terminal end  
XX of human placental lactogen (hPL), human growth hormone (hGH), growth  
XX hormone variant (hGH-V), or human prolactin. Such peptides (i) inhibit  
XX capillary endothelial cell proliferation and organisation (ii) inhibit  
XX angiogenesis in chick chorioallantoic membrane and (iii) binds to at  
XX least one specific receptor which does not bind an intact full length  
XX hGH, hPL, prolactin or hGH-V. The invention also describes a method for  
XX diagnosing a probable abnormality of placental vascularisation during  
XX pregnancy. The peptides can be used for treating an angiogenic disease in  
XX a subject, for inhibiting tumour formation or growth in a patient or for  
XX modulating vascularisation of a patient's placenta. In particular, the  
XX peptides can be used for preventing or treating e.g. malignant tumours,  
XX angiofibroma, arteriovenous malformation, arthritic such as rheumatoid  
XX arthritis, atherosclerotic plaques, corneal graft neovascularisation,  
XX delayed wound healing, proliferative retinopathy such as diabetic  
XX retinopathy, macular degeneration, granulations such as those occurring  
XX in haemophilic joints, inappropriate vascularisation in wound healing  
XX such as hypertrophic scars or keloid scars, neovascular glaucoma, ocular  
XX tumour, uveitis, non-union fractures, Osler-Weber syndrome, psoriasis,  
XX pyogenic glaucoma, retrolental fibroplasia, scleroderma, solid tumours,  
XX Kaposi's sarcoma, trachoma, vascular adhesions, chronic varicose ulcers,  
XX leukaemia, and reproductive disorders such as follicular and luteal cysts  
XX and choriocarcinoma. They can also be used as contraceptive agents. DNA  
XX encoding the peptides can be used in gene therapy. The measurement of  
XX abnormal levels of N-terminal fragments of hGH, hGH-V, prolactin or hPL  
XX can be used in assays for impairment of vascular development associated  
XX with pre-eclampsia, intrauterine growth retardation, and placental  
XX dysfunction  
XX  
XX Sequence 18 BP; 10 A; 4 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 17.0%; Score 12.4; DB 1; Length 18;  
Best Local Similarity 92.9%; Pred. No. 5.2e+02;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
Qy 907 ATTTCTTTGGTCT 920  
Db 18 ATTTCTTTGGTTT 5  
|||||  
RESULT 115  
ABL41558/c  
ID ABL41558 standard; DNA; 18 BP.  
XX  
XX ABL41558;  
XX  
XX 23-MAY-2002 (first entry)  
XX  
XX Primer #3 related to fusion gene of trehalose synthase.  
XX  
XX Fusion gene; trehalose synthase; ss; PCR primer.  
XX  
XX Brevibacterium helvolum.  
XX  
XX KR2001010091-A.  
XX  
XX 05-FEB-2001.  
XX  
XX 15-JUL-1999; 99KR-00028783.  
XX  
XX 15-JUL-1999; 99KR-00028783.  
XX  
XX (CHOL/) CHOI Y D.  
XX (KIMC/) KIM C H.  
XX  
XX Choi YD, Kim CH, Kim G, Kim JG, Kim YH, Lee JS, Lim JY;  
XX Park SS, Seo HS;  
XX WPI; 2001-481666/52.  
XX  
XX New fusion gene of trehalose synthase, fusion enzyme protein and method  
XX for producing trehalose using the same.  
XX  
XX Disclosure; Page 22; 25pp; Korean.  
XX  
XX This invention relates to a fusion gene of trehalose synthase, fusion  
XX enzyme protein and a method for producing trehalose using the same. The  
XX trehalose is effectively produced in higher yield using a fusion gene of  
XX BvMTase and BvMTase gene that code trehalose biosynthase. The present  
XX sequence represents a primer related to the fusion gene of trehalose  
XX synthase  
XX  
XX Sequence 18 BP; 7 A; 3 C; 5 G; 3 T; 0 U; 0 Other;  
  
Query Match 17.0%; Score 12.4; DB 1; Length 18;  
Best Local Similarity 92.9%; Pred. No. 5.2e+02;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
Qy 916 GGTCTTTGCCCTTT 929  
Db 15 GGTCAATGCCCTTTT 2  
|||||  
RESULT 116  
ABL41557  
ID ABL41557 standard; DNA; 18 BP.  
XX  
XX ABL41557;  
XX  
XX 23-MAY-2002 (first entry)  
XX  
XX Primer #2 related to fusion gene of trehalose synthase.  
XX  
XX Fusion gene; trehalose synthase; ss; PCR primer.

```

XX Brevibacterium helvolum.
PT KR2001010091-A.
PT
PS
XX
XX 05-FEB-2001.
XX
XX 15-JUL-1999; 99KR-00028783.
XX
XX 15-JUL-1999; 99KR-00028783.
XX
XX (CHOI/) CHOI Y D.
XX (KIMC/) KIM C H.
XX
XX Choi YD, Kim CH, Kim G, Kim JG, Kim YH, Lee JS, Lim JY;
XX Park SS, Seo HS;
XX WPI; 2001-481666/52.
XX
XX New fusion gene of trehalose synthase, fusion enzyme protein and method
XX for producing trehalose using the same.
XX
XX Disclosure; Page 22; 25pp; Korean.
XX
XX This invention relates to a fusion gene of trehalose synthase, fusion
XX enzyme protein and a method for producing trehalose using the same. The
XX trehalose is effectively produced in higher yield using a fusion gene of
XX BvMSase and BvWthase gene that code trehalose biosynthase. The present
XX synthase represents a primer related to the fusion gene of trehalose
XX
XX Sequence 18 BP; 3 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 17.0%; Score 12.4; DB 1; Length 18;
XX Best Local Similarity 92.9%; Pred. No. 5.2e+02;
XX Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 916 GGTCCTTGGCTTTT 929
XX ||||| |||||
XX 4 GGTCATGGCTTTT 17
XX
XX RESULT 117
XX AS16281
XX AAS16281 standard; DNA; 18 BP.
XX
XX AAS16281;
XX
XX 14-FEB-2002 (first entry)
XX
XX Mouse LiCAM cytoplasmic RT-PCR primer #2.
XX
XX Neurite outgrowth; fibronectin Type III repeat; cell adhesion molecule;
XX F80; Fn3-5; neurone; peripheral nerve damage; trauma; infarction;
XX degenerative disease; malignant disease; antibacterial;
XX central nervous system lesion; viricide; antiparkinsonian; nootropic;
XX neuroprotective; antiinflammatory; mouse; LiCAM; RT-PCR primer; ss.
XX
XX Mus sp.
XX
XX US6313265-B1.
XX
XX 06-NOV-2001.
XX
XX 24-JUL-1995; 95US-00506296.
XX
XX 24-JUL-1995; 95US-00506296.
XX
XX (SCRI ) SCRIPPS RES INST.
XX
XX Phillips G, Cunningham BA, Crossin KL;
XX WPI; 2002-017011/02.

```

```

XX Polypeptide for promoting neurite out-growth useful for treating diseases
XX such as inflammation, Parkinson's disease, trauma, comprises fibronectin
XX type III repeats derived from a family of cell adhesion molecules.
XX
XX Example 1; Col 29; 132pp; English.
XX
XX The present invention relates to polypeptides that promote neurite
XX growth. The polypeptides contain fibronectin Type III repeats derived
XX from a family of cell adhesion molecules (CAMs). The polypeptides of the
XX invention include the F80, Fn3-5, and Fn4-5 regions of the CAM family
XX members chicken Ng-CAM, chicken Nr-CAM, mouse LiCAM and human LiCAM. The
XX polypeptides of the invention are useful for promoting neurite outgrowth
XX of neuronal cells in vitro e.g. in a cell culture system, or in vivo for
XX treating disorders such as peripheral nerve damage associated with
XX physical or surgical trauma, infarction, bacterial or viral infections,
XX toxin exposure, degenerative disease, malignant disease that affects
XX peripheral or central neurones, or in surgical or transplantation methods
XX in which new neuronal cells from brain, spinal cord or dorsal root
XX ganglia are introduced and require stimulation of neurite outgrowth from
XX the implant and innervation into the recipient tissue, where the diseases
XX include central nervous systems lesions, gliosis, Parkinson's disease,
XX Alzheimer's disease, gliotic response or inflammation. The present
XX sequence for mouse LiCAM cytoplasmic reverse transcriptase (RT)-PCR
XX primer #2 is used with RT-PCR primer #1 (AAS16280) to amplify a probe for
XX the cloning of human LiCAM cDNA
XX
XX Sequence 18 BP; 2 A; 7 C; 1 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 17.0%; Score 12.4; DB 1; Length 18;
XX Best Local Similarity 92.9%; Pred. No. 5.2e+02;
XX Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 933 CCTCTCTTCATTG 946
XX DB 1 CCTCTCTTCATTG 14
XX
XX RESULT 118
XX AAQ20515
XX ID AAQ20515 standard; DNA; 19 BP.
XX
XX AAQ20515;
XX
XX 25-MAR-2003 (revised)
XX 20-MAR-1992 (first entry)
XX
XX H-ras ribozyme probe H-ras-Rb-5.
XX
XX Hras; oncogene; bladder carcinoma; neoplasm; probe; PCR.
XX
XX Synthetic.
XX
XX WO9118625-A.
XX
XX 12-DEC-1991.
XX
XX 07-JUN-1990; 90WO-US003218.
XX
XX 07-JUN-1990; 90WO-US003218.
XX 01-NOV-1990; 90WO-US006226.
XX 19-DEC-1990; 90WO-US007459.
XX
XX (CITY ) CITY OF HOPE.
XX
XX Scanlon KJ;
XX
XX WPI; 1992-007207/01.
XX
XX New ribozyme and plasmid - for cleavage of the Hras oncogene for
XX treatment of neoplasms including bladder cancer.
XX
XX Disclosure; Page 7; 25pp; English.

```

XX CC Ras ribozyme expression plasmids were introduced into EJ cells. G418-  
 CC resistant stable clones were screened for integration of the ras ribozyme  
 CC plasmid by PCR analysis of their DNA. This radiolabelled probe was  
 CC hybridised to the PCR prod. from 100 ng of EJ RNA, EJ pfbeta RNA and  
 CC EJpHbetaHras ribozyme clones. See also AAQ20196, AAQ20515-16 and  
 CC WO9118913 (AAQ20518-21) and WO9118624. (Updated on 25-MAR-2003 to correct  
 CC PR field.)  
 XX SQ Sequence 19 BP; 3 A; 4 C; 4 G; 8 T; 0 U; 0 Other;  
 Query Match 17.0%; Score 12.4; DB 1; Length 19;  
 Best Local Similarity 92.9%; Pred. No. 5.4e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 917 GTCCTTGCCTTTTA 930  
 Db 6 GTGTTTGCCTTTTA 19  
 RESULT 119  
 AAQ2894/c  
 ID AAQ2894 standard; DNA; 19 BP.  
 AC  
 AC AAQ2894;  
 DT 10-SEP-2001 (first entry)  
 DT  
 XX Human biallelic marker upstream amplification primer SEQ ID NO:7250.  
 DE  
 XX Human genome; biallelic marker; high density disequilibrium map;  
 KW genomic map; haplotype; phenotype; polymorphic base; genotyping;  
 KW haplotyping; hybridisation; identification; characterisation;  
 KW amplification; single nucleotide polymorphism; SNP; PCR primer;  
 KW diagnosis; ss.  
 XX  
 XX Homo sapiens.  
 CS  
 XX WO9954500-A2.  
 PN  
 XX 28-OCT-1999.  
 PJ  
 XX 21-APR-1999; 99WO-IB000822.  
 PF  
 XX 21-APR-1998; 98US-0082614P.  
 PR 23-NOV-1998; 98US-0109732P.  
 XX  
 XX (G8ST ) GENSET.  
 FA  
 XX Cohen D, Blumenfeld M, Chumakov I;  
 PI  
 XX WPI; 2000-013267/01.  
 DR  
 XX Novel biallelic markers used to construct a high density disequilibrium  
 PT map of the human genome.  
 PT  
 XX Claim 9; Page 1776; 2745pp; English.  
 PS  
 XX AAQ26564 to AAQ69578 represent human biallelic markers from the present  
 CC invention, which contain a polymorphic base at position 24 of their  
 CC nucleotide sequences. AAQ69579 to AAQ77440 represent amplification  
 CC primers for the biallelic markers. The biallelic markers of the invention  
 CC have a variety of uses: they can be used for high density mapping of the  
 CC human genome, and in complex association studies and haplotyping studies  
 CC which are useful in determining the genetic basis for disease states.  
 CC Compositions and methods of the invention can also be useful for the  
 CC identification of the targets for the development of pharmaceutical  
 CC agents and diagnostic methods, as well as the characterisation of the  
 CC differential efficacious responses to and side effects from  
 CC pharmaceutical agents acting on a disease as well as other treatment.  
 CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
 CC 3367, are not actually given a sequence in the Sequence Listing from the  
 CC present invention

XX SQ Sequence 19 BP; 9 A; 2 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 17.0%; Score 12.4; DB 1; Length 19;  
 Best Local Similarity 92.9%; Pred. No. 5.4e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 917 GTCCTTGCCTTTTA 930  
 Db 19 GTCCTTGCCTTTTA 6  
 RESULT 120  
 AAQ11387/c  
 ID AAQ11387 standard; DNA; 17 BP.  
 AC  
 AC AAQ11387;  
 DT 25-MAR-2003 (revised)  
 DT 02-JUL-1991 (first entry)  
 XX  
 XX Probe COD 931 specific for T. hyo 39kD antigen gene 2.  
 DE  
 XX Swine dysentery; vaccine.  
 KW  
 XX Synthetic.  
 OS  
 XX WO9104036-A.  
 PN  
 XX 04-APR-1991.  
 PD  
 XX 13-SEP-1989; 89US-00406535.  
 PF  
 XX 13-SEP-1989; 89US-00406535.  
 PR  
 XX (MLTE-) ML TECHN VENTURES.  
 XX  
 XX Gabe J, Dragon E, Mccaman M;  
 XX WPI; 1991-117317/16.  
 DR  
 XX Treponema hyodysenteriae antigens - having molecular wt. of 39 K daltons  
 PT and their DNA codes, and use for preparing vaccine.  
 PT  
 XX Disclosure; Page 38; 84pp; English.  
 PS  
 XX The probe was designed from the sequence of the pTrep330 encoding the T.  
 CC hyo 39 kD antigen no. 2. It was used for screening of clones prepd. from  
 CC T. hyo genomic DNA following PCR treatment. See also AAQ11377-Q11409.  
 CC (Updated on 25-MAR-2003 to correct PA field.)  
 CC  
 XX SQ Sequence 17 BP; 8 A; 1 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 16.7%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.4e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 928 TTATCCCTCTCTTCAT 944  
 Db 17 TTATCCGTCATATTCAT 1  
 RESULT 121  
 AAQ21838  
 ID AAQ21838 standard; DNA; 17 BP.  
 AC  
 AC AAQ21838;  
 XX  
 XX 25-JUN-1992 (first entry)  
 DT  
 XX Antisense polyamine-conjugated oligonucleotide to papilloma virus.  
 DE  
 XX Antisense translation sequence; antisense therapy; phosphorothioate;  
 KW

```

/ nuclease resistance; ss.
/ Synthetic.
/ Key modified_base 1 Location/Qualifiers
/   /tag= a
/   /mod_base= OTHER
/   /note= "5'-deoxy-5'-(diphenylimidazolin-2-yl) thymidine"
/ WO9202531-A.
/ 20-FEB-1992.
/ 27-JUL-1990; 90US-00558663.
/ 27-JUL-1990; 90US-00558663.
/ (ISIS-) ISIS PHARMA INC.
/ Cook PD, Guinasso CJ;
/ WPI; 1992-080013/10.
/ New poly-amine conjugated oligo-nucleotide analogues - target TAT region
/ of HIV and portions of Herpes and papilloma genome(s).
/ Example 3; Page 17; 26pp; English.
/ A phosphorothioate oligonucleotide able to hybridise to Papilloma virus
/ initiation of translation sequence was synthesised. The 5' thymidine
/ derivative was conjugated with a polyamine, pref. tris(aminobutyl)amine.
/ The resulting oligonucleotide analogue has enhanced cellular uptake and
/ is less susceptible to nuclease activity than standard oligonucleotides.
/ It can be used in anti-sense therapy. See AAQ21836-Q21842
/ Sequence 17 BP; 2 A; 8 C; 0 G; 7 T; 0 U; 0 Other;
/
/ Query Match 16.7%; Score 12.2; DB 1; Length 17;
/ Best Local Similarity 82.4%; Pred. No. 5.4e+02;
/ Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
/
/ 929 TATCCCTCTCTTCATT 945
/   |||||
/   1 TCTCCATCCTCTTCACT 17
/
/ RESULT 122
/ AQ57302
/   AAQ57302 standard; mRNA; 17 BP.
/   AAQ57302;
/   25-MAR-2003 (revised)
/   26-JUL-1994 (first entry)
/   Enzymatic RNA molecule c-myb mRNA target sequence.
/   Specific; cleavage; target RNA; protein; prophylaxis; expression;
/   inhibitor; inhibition; ribozyme; treatment; prevention; psoriasis;
/   asthma; inflammatory diseases; restenosis; cardiovascular condition;
/   hypertension; arthritis; ss.
/   Synthetic.
/   WO9402595-A1.
/   03-FEB-1994.
/   02-JUL-1993; 93WO-US006316.
/   17-JUL-1992; 92US-00916763.
/   07-DEC-1992; 92US-00987132.

```

```

PR 07-DEC-1992; 92US-00989848.
PR 07-DEC-1992; 92US-00989849.
PR 19-JAN-1993; 93US-00008895.
XX (RIBO-) RIBOZYME PHARM INC.
XX Sullivan SM, Draper KG;
XX WPI; 1994-048853/06.
XX Enzymatic RNA molecules which cleave mRNA - used to treat or prevent
XX inflammatory, arthritic, stenotic or cardiovascular diseases or
XX conditions.
XX Claim 3; Page 20; 65pp; English.
XX This is a c-myb mRNA target sequence (nucleotide no. 2695) of an
XX enzymatic RNA molecule (ribozyme) which cleaves mRNA associated with the
XX development or maintenance of a restenotic condition. The concn. of the
XX ribozyme necessary to effect a therapeutic treatment is lower than that
XX of an antisense oligonucleotide and the specificity of action is higher.
XX (Updated on 25-MAR-2003 to correct PN field.)
XX Sequence 17 BP; 2 A; 4 C; 4 G; 7 T; 0 U; 0 Other;
XX
/ Query Match 16.7%; Score 12.2; DB 1; Length 17;
/ Best Local Similarity 82.4%; Pred. No. 5.4e+02;
/ Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
/
/ QY 910 TTCCTTGGTCTTGCCT 926
/   |||||
/   1 TGCATGCTCTTAGCCT 17
/
/ Db
/
/ RESULT 123
/ AAT01734
/ ID AAT01734 standard; DNA; 17 BP.
/ AC
/ AAT01734;
/ DT 17-DEC-1995 (first entry)
/ XX
/ DE Peptide nucleic acid targetting HPV genome.
/ XX peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
/ KW antiviral; diagnostic; ss.
/ XX Synthetic.
/ XX
/ FH Key Location/Qualifiers
/ FT misc_feature 1..17
/ FT /tag= a
/ FT /note= "at least one (and preferably all) of the backbone
/ FT subunits are composed of amide units, so that the
/ FT oligomer consists of the nucleobases attached covalently
/ FT to a polyamide backbone"
/ XX
/ PN WO9504748-A1.
/ XX
/ XX 16-FEB-1995.
/ PD
/ XX 09-AUG-1994; 94WO-US009039.
/ PF
/ XX 09-AUG-1993; 93US-00104438.
/ PR
/ XX (ISIS-) ISIS PHARM INC.
/ PA
/ XX Anderson KE, Crooke ST, Mirabelli CK, Ecker DJ, Cowsett IM;
/ PI WPI; 1995-090841/12.
/ XX
/ DR
/ XX New peptide nucleic acid oligomers hybridisable to cytomegalovirus or
/ PT papilloma:virus - are stable anti-sense molecules with high affinity for

```

single stranded DNA, used for treating infections.

Claim 10; Page 52; 65pp; English.

New oligomers are claimed which (A) have at least one peptide nucleic acid (PNA) subunit and (B) have a sequence hybridizable to AUG region, 5' untranslated region, intron/exon (I/E) junction or coding sequence of cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or hybridizable to the E, E2, E4, E5, E6, E7, I1 or I2 reading frames of a papillomavirus. The PNAs can be used to target RNA and single stranded DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence they may be used therapeutically for modulating cytomegalovirus and papillomavirus processes and also as diagnostics (e.g., as probes for specific mRNAs). PNA oligomers have high affinity for complementary single stranded DNA. They are also able to form triple helices in which a first PNA strand binds with RNA or ssDNA and a second PNA strand binds with the resulting double helix or with the first PNA strand. The PNAs possess no significant charge and are water soluble, which facilitates cellular uptake. Further, since they contain amides of non-biological amino acids, they are biostable and resistant to enzymatic degradation by proteases. The present sequence targets a portion of the papillomavirus genome

Sequence 17 BP; 2 A; 8 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 16.7%; Score 12.2; DB 1; Length 17;

Best Local Similarity 82.4%; Pred. No. 5.4e+02; Mismatches 0; Indels 0; Gaps 0;

Matches 14; Conservative 0;

929 TATCCCTCTCTTCATT 945

1 TCTCATCTCTTCTACT 17

RESULT 124

AA18977

ID AA18977 standard; RNA; 17 BP.

AA18977;

19-JUN-2000 (first entry)

Human TIE-2 substrate sequence SEQ ID NO:2203.

Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytotstatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.

Homo sapiens.

CS

XX

XX

WO9950403-A2.

07-OCT-1999.

24-MAR-1999; 99WO-US006507.

27-MAR-1998; 98US-0079678P.

(RIBO-) RIBOZYME PHARM INC.

Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;

WPI; 1999-591315/50.

Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an angiogenic factors.

Claim 56; Page 129; 305pp; English.

The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AA16775 to AA17167 and AA17561 to AA17622 represent ribozyme sequences for ARNT, and AA17168 to AA17560 and AA17623 to AA17684 represent their corresponding target sequences; AA17685 to AA18385 and AA19087 to AA19154 represent ribozyme sequences for Tie-2, and AA18386 to AA19086 and AA19155 to AA19222 represent their corresponding target sequences; AA19223 to AA20361 and AA21501 to AA21595 represent ribozyme sequences for integrin alpha 6 subunit, and AA20362 to AA21500 and AA21596 to AA21688 represent their corresponding target sequences; AA21689 to AA22475 and AA23263 to AA23342 represent ribozyme sequences for integrin subunit beta 3, and AA22476 to AA23262, AA23343 to AA23422 represent their corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, or integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related macular degeneration (ARMD), inflammation, and arthritis, as well as neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2, and integrin subunit alpha-6, or integrin subunit beta-3

Sequence 17 BP; 3 A; 7 C; 0 G; 0 T; 7 U; 0 Other;

Query Match 16.7%; Score 12.2; DB 1; Length 17;

Best Local Similarity 41.2%; Pred. No. 5.4e+02; Mismatches 7; Conservative 7; Indels 0; Gaps 0;

924 CCTTTATCCCTCTCTCT 940

1 CAUUUUAUCCUCACCU 17

RESULT 125

AAV93545

ID AAV93545 standard; RNA; 17 BP.

AAV93545;

18-FEB-1999 (first entry)

Human B-raf substrate nucleotide position 1605.

Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme; target; substrate; catalyst; modulation; expression; Raf gene; delivery; screening; identification; synthesis; deprotection; purification; cancer; inflammation; psoriasis; non-hepatic ascites; infection; genetic drift; restenosis; rheumatoid arthritis; ss.

Homo sapiens.

XX

WO9850530-A2.

12-NOV-1998.

05-MAY-1998; 98WO-US009249.

09-MAY-1997; 97US-0046059P.

03-JUN-1997; 97US-0049002P.

03-JUL-1997; 97US-0051718P.

22-AUG-1997; 97US-0056808P.

02-OCT-1997; 97US-0061321P.

02-OCT-1997; 97US-0061324P.

05-NOV-1997; 97US-0064866P.

19-DEC-1997; 97US-0068212P.

(RIBO-) RIBOZYME PHARM INC.



XX The invention relates to enzymatic nucleic acid molecules that down  
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes  
CC by cleaving RNA derived from the genes. The nucleic acid sequences are  
CC useful as pharmaceutical agents for treating conditions such as chronic  
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic  
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions  
CC that are related to or will respond to the levels of CLCA1 in a cell or  
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,  
CC hence, are useful for treatment of a patient having a condition  
CC associated with the level of CLCA1, where the invention further comprises  
CC the use of one or more therapies under conditions suitable for the  
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,  
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The  
CC nucleic acids of the invention are also used as diagnostic tools to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of CLCA1 RNA in a cell. This sequence represents an  
CC enzymatic nucleic acid molecule of the invention  
XX  
XX Sequence 17 BP; 3 A; 7 C; 1 G; 0 T; 6 U; 0 Other;  
SQ  
Query Match 16.7%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 52.9%; Pred. No. 5.4e+02;  
Matches 9; Conservative 5; Mismatches 3; Indels 0; Gaps 0;  
QY 930 ATCCCTCTCTTCATTG 946  
|:|||||:|:|:|:|:  
Db 1 AUCCACCUUCUCAUUG 17  
RESULT 128  
ABT40203  
ID ABT40203 standard; DNA; 17 BP.  
XX  
AC ABT40203;  
XX  
DT 13-JUN-2003 (first entry)  
XX  
DE Tumour suppression related human fukutin oligo SEQ ID No 5840.  
XX  
KW Cytostatic; virucide; neuroprotective; nontropic; neuroleptic; gene chip;  
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;  
KW schizophrénia; protein chip; gene therapy; tumour suppression;  
KW human fukutin; ds.  
XX  
OS Homo sapiens.  
XX  
FN WO2003025175-A2.  
XX  
ED 27-MAR-2003.  
XX  
FF 17-SEP-2002; 2002WO-IB004208.  
XX  
PR 17-SEP-2001; 2001FR-00011978.  
XX  
PA (MOLE-) MOLECULAR ENGINES LAB.  
XX  
PI Telerman A, Amson R, Tuijnder M;  
XX  
DR WPI; 2003-313353/30.  
XX  
PT New isolated nucleic acid, useful for treating viral diseases associated  
PT with tumors and cell degeneration, also related polypeptides, antibodies  
PT and transfected cells.  
XX  
PS Disclosure; Page 716; 720pp; French.  
XX  
CC The invention relates to a novel isolated 17 mer nucleic acid sequence,  
CC given in the specification, a sequence containing at least 15 consecutive  
CC nucleotides from the 17 mer sequence, a sequence with, after optimal  
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that  
CC hybridizes to them under highly stringent conditions, or the complement  
CC of any of them, or the corresponding RNA. The novel isolated nucleic

CC acids of the invention are useful as probes and primers for detecting,  
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one  
CC component of a gene chip, in vitro as (anti)sense reagents, and for  
CC production of recombinant polypeptides. Any of the nucleic acids,  
CC polypeptides, vectors containing the nucleic acids, cells containing the  
CC vector or antibodies directed against the polypeptides are useful for  
CC preparation of pharmaceuticals for prevention and/or treatment of viral  
CC diseases that are characterised by development of tumours or cell  
CC degeneration, specifically cancer but also Alzheimer's disease and  
CC schizophrénia. Analysis of the expression of the 17 mer nucleic acids in  
CC patient samples is useful for diagnosis and/or prognosis of these  
CC diseases. The polypeptides can also be used to generate antibodies, and  
CC both the polypeptide and antibodies are useful as components of protein  
CC chips. The nucleic acid sequences of the invention can be used in gene  
CC therapy. This polynucleotide sequence represents a tumour suppression  
CC related human fukutin oligonucleotide of the invention  
XX  
XX Sequence 17 BP; 1 A; 3 C; 3 G; 10 T; 0 U; 0 Other;  
SQ  
Query Match 16.7%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 5.4e+02;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 916 GGTCTTTGCCCTTTTATC 932  
|:|||||:|:|:|:|:  
Db 1 GATCTTTGCTTTTGTC 17  
RESULT 129  
ACD61716/c  
ID ACD61716 standard; RNA; 17 BP.  
XX  
AC ACD61716;  
XX  
DT 23-SEP-2003 (first entry)  
XX  
DE HCV minus strand DNAzyme substrate sequence #195.  
XX  
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
KW RNA stability; RNA expression; RNA synthesis; antisense;  
KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;  
KW ambzyme; G-cleaver ribozyme; decoy molecule; aptamer;  
KW HBV reverse transcriptase; Enhancer I region; viral replication;  
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
KW virucide; antiinflammatory; substrate; ss.  
XX  
OS Hepatitis C virus.  
XX  
FN WO200281494-A1.  
XX  
ED 17-OCT-2002.  
XX  
PF 26-MAR-2002; 2002WO-US009187.  
XX  
PR 26-MAR-2001; 2001US-00817879.  
PR 08-JUN-2001; 2001US-00877478.  
PR 08-JUN-2001; 2001US-0296876P.  
PR 24-OCT-2001; 2001US-0335059P.  
PR 05-DEC-2001; 2001US-0337055P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MACEJAK) MACEJAK D.  
PA (MCSW/) MCSWIGGEN J.  
PA (MORR/) MORRISSEY D.  
PA (PVC/) PAVCO P.  
PA (LEEF/) LEE P.  
PA (DRAP/) DRAPER K.  
PA (ROBE/) ROBERTS E.  
XX  
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
PI Draper K, Roberts E;

WPI; 2003-229207/22.  
Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus infection.  
Claim 1; Page 278; 387pp; English.  
The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes, inozymes, zinzymes, ambezozymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase and/or HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HCV DNzyme or minus strand DNzyme sequences disclosed in the present invention  
Sequence 17 BP; 7 A; 5 C; 4 G; 0 T; 1 U; 0 Other;  
Query Match 16.7%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 5.4e+02;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
/ 900 CCTGTCATTTCTTTG 916  
| | | | | | | | | | | | | | | |  
17 CCTGTCGTTATCTGTG 1  
RESULT 130  
JB43899  
ADB43899 standard; DNA; 17 BP.  
ADB43899;  
18-DEC-2003 (revised)  
04-DEC-2003 (first entry)  
Tumour suppression/reversion associated nucleotide #4222.  
cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;  
primer; probe; tumour suppression; tumour reversion; apoptosis;  
virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;  
diagnosis.  
Homo sapiens.  
WO2003040369-A2.  
15-MAY-2003.  
17-SEP-2002; 2002WO-IB004219.  
17-SEP-2001; 2001FR-00011981.  
(MOLE-) MOLECULAR ENGINES LAB.  
Telerman A, Amson R, Tuijnder M;  
WPI; 2003-441574/41.  
New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related

polypeptide and antibodies.  
Disclosure; Page 525; 771pp; French.  
The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia). Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal expression of the nucleotides.  
Sequence 17 BP; 3 A; 3 C; 4 G; 7 T; 0 U; 0 Other;  
Query Match 16.7%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 5.4e+02;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 903 GGTCAATTTCTTTGGTC 919  
| | | | | | | | | | | | | | | |  
Db 1 GATCAATTTCTTTGGGAC 17  
RESULT 131  
ADC04003  
ID ADC04003 standard; DNA; 17 BP.  
XX  
AC ADC04003;  
XX  
DT 18-DEC-2003 (first entry)  
XX  
DE Human Na/H exchanger-like protein 1 gene oligonucleotide #450.  
XX  
KW ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;  
KW NHEPLP1; passive replacement therapy; vaccine; diagnosis.  
XX  
OS Homo sapiens.  
XX  
PN EP1273660-A2.  
XX  
PD 08-JAN-2003.  
XX  
PF 25-JAN-2002; 2002EP-00001160.  
XX  
PR 30-JAN-2001; 2001WO-US000666.  
PR 23-MAY-2001; 2001US-00864761.  
PR 21-DEC-2001; 2001US-0343331P.  
XX  
PA (AEOM-) AEOMICA INC.  
XX  
PI Gu Y;  
XX  
DR WPI; 2003-302724/30.  
XX  
PT New human sodium-hydrogen exchanger like protein 1 (NHEPLP1), useful as a passive replacement therapy or as a vaccine for treating or preventing disorders associated with aberrant expression or activity of human NHEPLP1.  
XX  
PS Example 2; SEQ ID NO 490; 468pp; English.



XX The invention relates to a nucleic acid molecule which encodes a Na<sup>+</sup>/H<sup>+</sup> exchanger like protein (NHEP1). The NHEP1 nucleic acid molecule, NHEP1 polypeptide, an antibody against the protein or its antigen-binding fragment is useful in therapy. The NHEP1 nucleic acid molecule, NHEP1 polypeptide and an agonist are particularly useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHEP1. The antibody or its antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHEP1. The NHEP1 nucleic acid or protein is useful as passive replacement therapy, as a vaccine, or in diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide spanning the sequence of the human NHEP1 gene (ADC03514).

XX Sequence 17 BP; 3 A; 3 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 16.7%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 5.4e+02;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 938 TCTTCATGTTTAAATG 954  
||||| |||||  
Db 1 TCTTCATGTTTAACTG 17

RESULT 132  
ADC04000  
ID ADC04000 standard; DNA; 17 BP.  
XX  
AC ADC04000;  
XX  
DT 18-DEC-2003 (first entry)  
XX  
DE Human Na/H exchanger-like protein 1 gene oligonucleotide #447.  
XX  
KW ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;  
KW NHEP1; passive replacement therapy; vaccine; diagnosis.  
XX  
OS Homo sapiens.  
XX  
FN EP1273660-A2.  
XX  
PD 08-JAN-2003.  
XX  
PF 25-JAN-2002; 2002EP-00001160.  
XX  
PR 30-JAN-2001; 2001WO-US000666.  
PR 23-MAY-2001; 2001US-00864761.  
PR 21-DEC-2001; 2001US-0343331P.  
XX  
PA (AEOM-) AEOMICA INC.  
XX  
PI Gu Y;  
XX  
DR WPI; 2003-302724/30.  
XX  
PT New human sodium-hydrogen exchanger like protein 1 (NHEP1), useful as a passive replacement therapy or as a vaccine for treating or preventing disorders associated with aberrant expression or activity of human NHEP1.  
XX  
PS Example 2; SEQ ID NO 487; 468pp; English.  
XX  
CC The invention relates to a nucleic acid molecule which encodes a Na<sup>+</sup>/H<sup>+</sup> exchanger like protein (NHEP1). The NHEP1 nucleic acid molecule, NHEP1 polypeptide, an antibody against the protein or its antigen-binding fragment is useful in therapy. The NHEP1 nucleic acid molecule, NHEP1 polypeptide and an agonist are particularly useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHEP1. The antibody or its antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with

CC increased expression or activity of human NHEP1. The NHEP1 nucleic acid or protein is useful as passive replacement therapy, as a vaccine, or in diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide spanning the sequence of the human NHEP1 gene (ADC03514).

XX Sequence 17 BP; 3 A; 3 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 16.7%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 5.4e+02;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 935 TCTTCATGTTTAA 951  
||||| |||||  
Db 1 TCTTCATGTTTAA 17

RESULT 133  
AAAX15196  
ID AAAX15196 standard; DNA; 18 BP.  
XX  
AC AAAX15196;  
XX  
DT 25-MAR-2003 (revised)  
DT 28-APR-1999 (first entry)  
XX  
DE Triple helix forming oligonucleotide.  
XX  
KW Double-stranded DNA; triple helix; quinoline;  
KW quinazoline-based structure; hydrogen bonding; ss.  
XX  
OS Synthetic.  
XX  
FN WO9623777-A1.  
XX  
PD 08-AUG-1996.  
XX  
PF 29-JAN-1996; 96WO-US001473.  
XX  
PR 01-FEB-1995; 95US-00384324.  
XX  
PA (UYNE-) UNIV NEBRASKA.  
XX  
PI Gold BI;  
XX  
DR WPI; 1996-371338/37.  
XX  
PT New substd. quinoline and quinazoline cpds. - are monomers for triple helix-forming oligo:nucleotide analogues useful e.g. for treating tumours or viral infection.  
XX  
PS Disclosure; Fig 1; 102pp; English.  
XX  
CC The present sequence represents a triple helix forming oligonucleotide that form a triple helix with the double-stranded DNA sequence described in AAAX15195. The specification describes novel monomeric compositions which are substituted quinoline or quinazoline-based structures capable of hydrogen bonding specifically with interstrand purine-pyrimidine pairs in a double stranded Watson-Crick DNA molecule to form a triple-helix. (Updated on 25-MAR-2003 to correct PF field.)  
XX  
SQ Sequence 18 BP; 0 A; 3 C; 0 G; 15 T; 0 U; 0 Other;

Query Match 16.7%; Score 12.2; DB 1; Length 18;  
Best Local Similarity 82.4%; Pred. No. 5.6e+02;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 908 TTTTCTTTGGTCTTTC 924  
||||| |||||  
Db 1 TTTTCTTTTCTTTC 17

RESULT 134  
AAAX61956

```

1 AAX61956 standard; DNA; 18 BP.
2
3 AAX61956;
4
5 31-AUG-1999 (first entry)
6
7 Type-specific HPV probe SGP61.
8
9 PCR primer; probe; human papillomavirus; HPV; A region; B region;
10 C region; D region; detection; HPV genotype; cervical cancer; ss.
11
12 Synthetic.
13
14 Human papillomavirus.
15
16 WO9914377-A2.
17
18 25-MAR-1999.
19
20 14-SEP-1998; 98WO-EP005829.
21
22 16-SEP-1997; 97EP-00870136.
23
24 (INNO-) INNOGENETICS NV.
25 (DELF-) DELFTS DIAGNOSTIC LAB BV.
26
27 Van Doorn L, Quint W, Kleter B, Ter Schegget J;
28
29 WPI; 1999-244048/20.
30
31 Detection and identification of human papillomavirus.
32
33 Claim 8; Page 32; 78pp; English.
34
35 AAX61849-X61982 and AAX62002-X62093 represent PCR primers and probes used
36 for detecting and/or identifying human papillomavirus (HPV) present in a
37 biological sample. The method comprises amplification of a polynucleic
38 acid fragment of HPV using a 5'-primer specifically hybridizing to the A
39 region or B region of the genome of at least one HPV type, and a 3'-
40 primer specifically hybridizing to the C region of at least one HPV type,
41 and hybridisation of the amplified fragments with at least one probe
42 capable of specific hybridization with the D region of at least one HPV
43 type. The primers individually or as a combination of 5'-primer and 3'-
44 primer, and the probes are used in the detection and/or identification of
45 HPV present in a biological sample. An isolated HPV polynucleotide, or
46 fragment, can also be used as a primer in a method for detection and/or
47 identification of HPV present in a sample. Identification of the
48 different HPV genotypes may have great clinical and epidemiological
49 importance. The presence of high-risk HPV types is a prognostic marker
50 for development and detection of cervical cancer
51
52 Sequence 18 BP; 4 A; 0 C; 4 G; 10 T; 0 U; 0 Other;
53
54 Query Match 16.7%; Score 12.2; DB 1; Length 18;
55 Best Local Similarity 82.4%; Pred. No. 5.6e+02;
56 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
57
58 945 TGGTTTAATGATCGCT 961
59 |||||
60 1 TGGTTTAATGAAATGTT 17
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000
1001
1002
1003
1004
1005
1006
1007
1008
1009
1010
1011
1012
1013
1014
1015
1016
1017
1018
1019
1020
1021
1022
1023
1024
1025
1026
1027
1028
1029
1030
1031
1032
1033
1034
1035
1036
1037
1038
1039
1040
1041
1042
1043
1044
1045
1046
1047
1048
1049
1050
1051
1052
1053
1054
1055
1056
1057
1058
1059
1060
1061
1062
1063
1064
1065
1066
1067
1068
1069
1070
1071
1072
1073
1074
1075
1076
1077
1078
1079
1080
1081
1082
1083
1084
1085
1086
1087
1088
1089
1090
1091
1092
1093
1094
1095
1096
1097
1098
1099
1100
1101
1102
1103
1104
1105
1106
1107
1108
1109
1110
1111
1112
1113
1114
1115
1116
1117
1118
1119
1120
1121
1122
1123
1124
1125
1126
1127
1128
1129
1130
1131
1132
1133
1134
1135
1136
1137
1138
1139
1140
1141
1142
1143
1144
1145
1146
1147
1148
1149
1150
1151
1152
1153
1154
1155
1156
1157
1158
1159
1160
1161
1162
1163
1164
1165
1166
1167
1168
1169
1170
1171
1172
1173
1174
1175
1176
1177
1178
1179
1180
1181
1182
1183
1184
1185
1186
1187
1188
1189
1190
1191
1192
1193
1194
1195
1196
1197
1198
1199
1200
1201
1202
1203
1204
1205
1206
1207
1208
1209
1210
1211
1212
1213
1214
1215
1216
1217
1218
1219
1220
1221
1222
1223
1224
1225
1226
1227
1228
1229
1230
1231
1232
1233
1234
1235
1236
1237
1238
1239
1240
1241
1242
1243
1244
1245
1246
1247
1248
1249
1250
1251
1252
1253
1254
1255
1256
1257
1258
1259
1260
1261
1262
1263
1264
1265
1266
1267
1268
1269
1270
1271
1272
1273
1274
1275
1276
1277
1278
1279
1280
1281
1282
1283
1284
1285
1286
1287
1288
1289
1290
1291
1292
1293
1294
1295
1296
1297
1298
1299
1300
1301
1302
1303
1304
1305
1306
1307
1308
1309
1310
1311
1312
1313
1314
1315
1316
1317
1318
1319
1320
1321
1322
1323
1324
1325
1326
1327
1328
1329
1330
1331
1332
1333
1334
1335
1336
1337
1338
1339
1340
1341
1342
1343
1344
1345
1346
1347
1348
1349
1350
1351
1352
1353
1354
1355
1356
1357
1358
1359
1360
1361
1362
1363
1364
1365
1366
1367
1368
1369
1370
1371
1372
1373
1374
1375
1376
1377
1378
1379
1380
1381
1382
1383
1384
1385
1386
1387
1388
1389
1390
1391
1392
1393
1394
1395
1396
1397
1398
1399
1400
1401
1402
1403
1404
1405
1406
1407
1408
1409
1410
1411
1412
1413
1414
1415
1416
1417
1418
1419
1420
1421
1422
1423
1424
1425
1426
1427
1428
1429
1430
1431
1432
1433
1434
1435
1436
1437
1438
1439
1440
1441
1442
1443
1444
1445
1446
1447
1448
1449
1450
1451
1452
1453
1454
1455
1456
1457
1458
1459
1460
1461
1462
1463
1464
1465
1466
1467
1468
1469
1470
1471
1472
1473
1474
1475
1476
1477
1478
1479
1480
1481
1482
1483
1484
1485
1486
1487
1488
1489
1490
1491
1492
1493
1494
1495
1496
1497
1498
1499
1500
1501
1502
1503
1504
1505
1506
1507
1508
1509
1510
1511
1512
1513
1514
1515
1516
1517
1518
1519
1520
1521
1522
1523
1524
1525
1526
1527
1528
1529
1530
1531
1532
1533
1534
1535
1536
1537
1538
1539
1540
1541
1542
1543
1544
1545
1546
1547
1548
1549
1550
1551
1552
1553
1554
1555
1556
1557
1558
1559
1560
1561
1562
1563
1564
1565
1566
1567
1568
1569
1570
1571
1572
1573
1574
1575
1576
1577
1578
1579
1580
1581
1582
1583
1584
1585
1586
1587
1588
1589
1590
1591
1592
1593
1594
1595
1596
1597
1598
1599
1600
1601
1602
1603
1604
1605
1606
1607
1608
1609
1610
1611
1612
1613
1614
1615
1616
1617
1618
1619
1620
1621
1622
1623
1624
1625
1626
1627
1628
1629
1630
1631
1632
1633
1634
1635
1636
1637
1638
1639
1640
1641
1642
1643
1644
1645
1646
1647
1648
1649
1650
1651
1652
1653
1654
1655
1656
1657
1658
1659
1660
1661
1662
1663
1664
1665
1666
1667
1668
1669
1670
1671
1672
1673
1674
1675
1676
1677
1678
1679
1680
1681
1682
1683
1684
1685
1686
1687
1688
1689
1690
1691
1692
1693
1694
1695
1696
1697
1698
1699
1700
1701
1702
1703
1704
1705
1706
1707
1708
1709
1710
1711
1712
1713
1714
1715
1716
1717
1718
1719
1720
1721
1722
1723
1724
1725
1726
1727
1728
1729
1730
1731
1732
1733
1734
1735
1736
1737
1738
1739
1740
1741
1742
1743
1744
1745
1746
1747
1748
1749
1750
1751
1752
1753
1754
1755
1756
1757
1758
1759
1760
1761
1762
1763
1764
1765
1766
1767
1768
1769
1770
1771
1772
1773
1774
1775
1776
1777
1778
1779
1780
1781
1782
1783
1784
1785
1786
1787
1788
1789
1790
1791
1792
1793
1794
1795
1796
1797
1798
1799
1800
1801
1802
1803
1804
1805
1806
1807
1808
1809
1810
1811
1812
1813
1814
1815
1816
1817
1818
1819
1820
1821
1822
1823
1824
1825
1826
1827
1828
1829
1830
1831
1832
1833
1834
1835
1836
1837
1838
1839
1840
1841
1842
1843
1844
1845
1846
1847
1848
1849
1850
1851
1852
1853
1854
1855
1856
1857
1858
1859
1860
1861
1862
1863
1864
1865
1866
1867
1868
1869
1870
1871
1872
1873
1874
1875
1876
1877
1878
1879
1880
1881
1882
1883
1884
1885
1886
1887
1888
1889
1890
1891
1892
1893
1894
1895
1896
1897
1898
1899
1900
1901
1902
1903
1904
1905
1906
1907
1908
1909
1910
1911
1912
1913
1914
1915
1916
1917
1918
1919
1920
1921
1922
1923
1924
1925
1926
1927
1928
1929
1930
1931
1932
1933
1934
1935
1936
1937
1938
1939
1940
1941
1942
1943
1944
1945
1946
1947
1948
1949
1950
1951
1952
1953
1954
1955
1956
1957
1958
1959
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971
1972
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
2031
2032
2033
2034
2035
2036
2037
2038
2039
2040
2041
2042
2043
2044
2045
2046
2047
2048
2049
2050
2051
2052
2053
2054
2055
2056
2057
2058
2059
2060
2061
2062
2063
2064
2065
2066
2067
2068
2069
2070
2071
2072
2073
2074
2075
2076
2077
2078
2079
2080
2081
2082
2083
2084
2085
2086
2087
2088
2089
2090
2091
2092
2093
2094
2095
2096
2097
2098
2099
2100
2101
2102
2103
2104
2105
2106
2107
2108
2109
2110
2111
2112
2113
2114
2115
2116
2117
2118
2119
2120
2121
2122
2123
2124
2125
2126
2127
2128
2129
2130
2131
2132
2133
2134
2135
2136
2137
2138
2139
2140
2141
2142
2143
2144
2145
2146
2147
2148
2149
2150
2151
2152
2153
2154
2155
2156
2157
2158
2159
2160
2161
2162
2163
2164
2165
2166
2167
2168
2169
2170
2171
2172
2173
2174
2175
2176
2177
2178
2179
2180
2181
2182
2183
2184
2185
2186
2187
2188
2189
2190
2191
2192
2193
2194
2195
2196
2197
2198
2199
2200
2201
2202
2203
2204
2205
2206
2207
2208
2209
2210
2211
2212
2213
2214
2215
2216
2217
2218
2219
2220
2221
2222
2223
2224
2225
2226
2227
2228
2229
2230
2231
2232
2233
2234
2235
2236
2237
2238
2239
2240
2241
2242
2243
2244
2245
2246
2247
2248
2249
2250
2251
2252
2253
2254
2255
2256
2257
2258
2259
2260
2261
2262
2263
2264
2265
2266
2267
2268
2269
2270
2271
2272
2273
2274
2275
2276
2277
2278
2279
2280
2281
2282
2283
2284
2285
2286
2287
2288
2289
2290
2291
2292
2293
2294
2295
2296
2297
2298
2299
2300
2301
2302
2303
2304
2305
2306
2307
2308
2309
2310
2311
2312
2313
2314
2315
2316
2317
2318
2319
2320
2321
2322
2323
2324
2325
2326
2327
2328
2329
2330
2331
2332
2333
2334
2335
2336
2337
2338
2339
2340
2341
2342
2343
2344
2345
2346
2347
2348
2349
2350
2351
2352
2353
2354
2355
2356
2357
2358
2359
2360
2361
2362
2363
2364
2365
2366
2367
2368
2369
2370
2371
2372
2373
2374
2375
2376
2377
2378
2379
2380
2381
2382
2383
2384
2385
2386
2387
2388
2389
2390
2391
2392
2393
2394
2395
2396
2397
2398
2399
2400
2401
2402
2403
2404
2405
2406
2407
2408
2409
2410
2411
2412
2413
2414
2415
2416
2417
2418
2419
2420
2421
2422
2423
2424
2425
2426
2427
2428
2429
2430
2431
2432
2433
2434
2435
2436
2437
2438
2439
2440
2441
2442
2443
2444
2445
2446
2447
2448
2449
2450
2451
2452
2453
2454
2455
2456
2457
2458
2459
2460
2461
2462
2463
2464
2465
2466
2467
2468
2469
2470
2471
2472
2473
2474
2475
2476
2477
2478
2479
2480
2481
2482
2483
2484
2485
2486
2487
2488
2489
2490
2491
2492
2493
2494
2495
2496
2497
2498
2499
2500
2501
2502
2503
2504
2505
2506
2507
2508
2509
2510
2511
2512
2513
2514
2515
2516
2517
2518
2519
2520
2521
2522
2523
2524
2525
2526
2527
2528
2529
2530
2531
2532
2533
2534
2535
2536
2537
2538
2539
2540
254
```



AAZ72820;  
 10-SEP-2001 (first entry)  
 Human biallelic marker upstream amplification primer SEQ ID NO:7176.  
 Human genome; biallelic marker; high density disequilibrium map;  
 genomic map; haplotype; phenotype; polymorphic base; genotyping;  
 haplotyping; hybridisation; identification; characterisation;  
 amplification; single nucleotide polymorphism; SNP; PCR primer;  
 diagnosis; ss.  
 Homo sapiens.  
 WO9954500-A2.  
 28-OCT-1999.  
 21-APR-1999; 99WO-IB0000822.  
 21-APR-1998; 98US-0082614P.  
 23-NOV-1998; 98US-0109732P.  
 (GEST ) GENSET.  
 Cohen D, Blumenfeld M, Chumakov I;  
 WPI; 2000-013267/01.  
 Novel biallelic markers used to construct a high density disequilibrium  
 map of the human genome.  
 Claim 9; Page 1761; 2745pp; English.  
 AAZ5654 to AAZ69578 represent human biallelic markers from the present  
 invention, which contain a polymorphic base at position 24 of their  
 nucleotide sequences. AAZ69579 to AAZ77440 represent amplification  
 primers for the biallelic markers. The biallelic markers of the invention  
 have a variety of uses: they can be used for high density mapping of the  
 human genome, and in complex association studies and haplotyping studies  
 which are useful in determining the genetic basis for disease states.  
 Compositions and methods of the invention can also be useful for the  
 identification of the targets for the development of pharmaceutical  
 agents and diagnostic methods, as well as the characterisation of the  
 differential efficacious responses to and side effects from  
 pharmaceutical agents acting on a disease as well as other treatment.  
 N.B. The SEQ ID Nos 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
 3367, are not actually given a sequence in the Sequence Listing from the  
 present invention  
 Sequence 18 BP; 7 A; 2 C; 8 G; 1 T; 0 U; 0 Other;  
 Query Match 16.7%; Score 12.2; DB 1; Length 18;  
 Best Local Similarity 82.4%; Pred. No. 5.6e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 929 TATCCCTCTCTTCATT 945  
 |||||  
 17 TGTCCTCTCTGCTCATT 1  
 ASULT 140  
 AS14539  
 AAS14539 standard; DNA; 18 BP.  
 AAS14539;  
 18-DEC-2001 (first entry)  
 Tobacco rbcL PCR primer 3-rbs.  
 Tobacco; ss; PCR primer; 3-rbs; plastid; transplastomic plant;  
 aminoglycoside 3'-adenyltransferase; aadA; 16s rrr; rbcL;

KW ribosome binding site.  
 XX Nicotiana tabacum.  
 OS  
 XX WO200170939-A1.  
 PN  
 XX 27-SEP-2001.  
 PD  
 XX 22-MAR-2001; 2001WO-US009318.  
 PF  
 XX 22-MAR-2000; 2000US-0191147P.  
 PR  
 XX (ICON-) ICON GENETICS INC.  
 PA  
 XX Kuchuk NV;  
 PI  
 XX WPI; 2001-590174/66.  
 DR  
 XX Transforming plastids, useful for making transplastomic plants, comprises  
 PT transferring plastid from one plant to another, transforming plastid with  
 PT desired nucleic acid and transferring transformed plastid to different  
 PT plant.  
 XX  
 PS Example 9; Page 15; 30pp; English.  
 XX  
 CC The invention relates to transforming plastids, comprising transferring a  
 CC plastid from a cell of a plant to a cell of a genetically distinct plant,  
 CC introducing a desired nucleic acid into the plastid and transferring the  
 CC transformed plastid into a cell of a third plant, where the first and  
 CC third plants are genetically identical or distinct from each other. The  
 CC transforming plastids are useful for making a transplastomic plant. The  
 CC transplastomic plant from is regenerated from cells transformed with the  
 CC plastid and express a selectable marker gene. Unlike prior art  
 CC techniques, the method provides easy and efficient plastid manipulation  
 CC in essentially all crop species, particularly economically important  
 CC varieties (e.g. potato, tomato, tobacco, pepper and eggplant). The  
 CC present sequence is a PCR primer which adds a sequence encoding a  
 CC ribosome binding site form the tobacco rbcL gene to a promoter fragment  
 CC from the tobacco 16s rrr gene. This promoter is used to drive expression  
 CC of an E. coli aminoglycoside 3'-adenyltransferase (aadA) gene when  
 CC inserted into a transforming plastid and expressed in a transplastomic  
 CC plant  
 XX  
 SQ Sequence 18 BP; 2 A; 7 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 16.7%; Score 12.2; DB 1; Length 18;  
 Best Local Similarity 82.4%; Pred. No. 5.6e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 922 TGCTTTTATCCCTCTCT 938  
 |||||  
 2 TGCCATGGATCCCTCTCT 18  
 Db  
 RESULT 141  
 AAH61808  
 ID AAH61808 standard; DNA; 18 BP.  
 XX  
 AC AAH61808;  
 XX  
 DT 10-SEP-2001 (first entry)  
 DE  
 DE Cdc 2 kinase hammerhead ribozyme recognition site SEQ ID NO:4232.  
 XX  
 KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
 KW recognition site; target; ribozyme binding site; eye disease; vulvovaginal;  
 KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
 KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
 KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;  
 KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;  
 KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;  
 KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
 KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;

KW sickle cell retinopathy; ss.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX WO200130362-A2.  
 XX  
 XX  
 XX  
 PD 03-MAY-2001.  
 XX  
 XX 26-OCT-2000; 2000WO-US029500.  
 XX  
 XX 26-OCT-1999; 99US-0161532P.  
 XX  
 XX (IMMU-) IMMUSOL INC.  
 XX  
 XX Robbins JM, Tritz R;  
 XX WPI; 2001-300427/31.  
 XX  
 XX Treating proliferative skin or eye diseases and scarring, using ribozymes  
 PT that cleave RNA encoding cytokines involved in inflammation, matrix  
 PT metalloproteinases, growth factors and cell-cycle dependent kinases.  
 XX  
 XX Disclosure; Page 381; 408pp; English.  
 XX  
 XX The present invention describes a method for treating a proliferative  
 CC skin or eye disease and scarring. The method involves administering a  
 CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
 CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
 CC dependent kinase, growth factor or a reductase, or administering a  
 CC nucleic acid molecule (II) comprising a promoter operably linked to a  
 CC nucleic acid segment encoding (I). (I) can have antipsoriatic,  
 CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,  
 CC ophthalmological, vulnary, keratolytic and virucide activities, and  
 CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
 CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
 CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
 CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
 CC also be used for treating proliferative eye diseases such as diabetic  
 CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
 CC prematurity and retinal detachment, and for treating and preventing  
 CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
 CC scar. AAH57577 to AAH62099 represent sequences used in the  
 CC exemplification of the present invention  
 XX  
 XX Sequence 18 BP; 2 A; 7 C; 2 G; 7 T; 0 U; 0 Other;  
 Query Match 16.7%; Score 12.2; DB 1; Length 18;  
 Best Local Similarity 82.4%; Pred. NO. 5.6e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 921 TTGGCTTTTATCCCTCC 937  
 |||||  
 Db 2 TTGGATCTATCCCTCC 18  
 RESULT 142  
 AAH61811  
 ID AAH61811 standard; DNA; 18 BP.  
 XX  
 XX AAH61811;  
 XX  
 XX 10-SEP-2001 (first entry)  
 XX  
 XX Cdc 2 kinase hammerhead ribozyme recognition site SEQ ID NO:4235.  
 DE Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
 DE recognition site; target; ribozyme binding site; eye disease; vulnary;  
 KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
 KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
 KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;  
 KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;  
 KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;

KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
 KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
 KW sickle cell retinopathy; ss.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX WO200130362-A2.  
 XX  
 XX 03-MAY-2001.  
 XX  
 XX 26-OCT-2000; 2000WO-US029500.  
 XX  
 XX 26-OCT-1999; 99US-0161532P.  
 XX  
 XX (IMMU-) IMMUSOL INC.  
 XX  
 XX Robbins JM, Tritz R;  
 XX WPI; 2001-300427/31.  
 XX  
 XX Treating proliferative skin or eye diseases and scarring, using ribozymes  
 PT that cleave RNA encoding cytokines involved in inflammation, matrix  
 PT metalloproteinases, growth factors and cell-cycle dependent kinases.  
 XX  
 XX Disclosure; Page 382; 408pp; English.  
 XX  
 XX The present invention describes a method for treating a proliferative  
 CC skin or eye disease and scarring. The method involves administering a  
 CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
 CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
 CC dependent kinase, growth factor or a reductase, or administering a  
 CC nucleic acid molecule (II) comprising a promoter operably linked to a  
 CC nucleic acid segment encoding (I). (I) can have antipsoriatic,  
 CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,  
 CC ophthalmological, vulnary, keratolytic and virucide activities, and  
 CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
 CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
 CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
 CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
 CC also be used for treating proliferative eye diseases such as diabetic  
 CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
 CC prematurity and retinal detachment, and for treating and preventing  
 CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
 CC scar. AAH57577 to AAH62099 represent sequences used in the  
 CC exemplification of the present invention  
 XX  
 XX Sequence 18 BP; 2 A; 7 C; 3 G; 6 T; 0 U; 0 Other;  
 Query Match 16.7%; Score 12.2; DB 1; Length 18;  
 Best Local Similarity 82.4%; Pred. NO. 5.6e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 929 TATCCCTCTCTTCATT 945  
 |||||  
 Db 2 TATCCCTCTCTGTAGT 18  
 RESULT 143  
 AAH61809  
 ID AAH61809 standard; DNA; 18 BP.  
 XX  
 XX AAH61809;  
 XX  
 XX 10-SEP-2001 (first entry)  
 XX  
 XX Cdc 2 kinase hammerhead ribozyme recognition site SEQ ID NO:4233.  
 DE Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
 DE recognition site; target; ribozyme binding site; eye disease; vulnary;  
 KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
 KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
 KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;  
 KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;  
 KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;

antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.

Homo sapiens.  
Synthetic.

WO200130362-A2.  
03-MAY-2001.

26-OCT-2000; 2000WO-US029500.  
26-OCT-1999; 99US-0161532P.  
(IMMU-) IMMUSOL INC.  
Robbins JM, Tritz R;  
WPI; 2001-300427/31.

Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.

Disclosure; Page 381; 408pp; English.

The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (I) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulvar, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the exemplification of the present invention

Sequence 18 BP; 2 A; 6 C; 3 G; 7 T; 0 U; 0 Other;

Query Match	16.7%;	Score 12.2;	DB 1;	Length 18;
Best Local Similarity	82.4%;	Pred. No. 5.6e+02;		
Matches	14;	Conservative 0;	Mismatches 3;	Indels 0;
		Gaps 0;		

922	TGCGTTTATCCCTCCT	938
1	TGGATTCTATCCCTCCT	17

RESULT 144  
CA60651/c  
D ACA60651 standard; DNA; 18 BP.  
X ACA60651;  
X  
X 11-JUN-2003 (first entry)  
T  
E Antisense inhibition of human cyclin D2 related oligonucleotide #88.  
X Human; cyclin D2; diagnostic; therapeutic; prophylaxis;  
X cyclin 2 inhibition; ss.

PT New oligonucleotides, useful for detecting bacteria that may contaminate  
 PT drinking water, provide quick results for many species in parallel.  
 XX  
 PS Claim 8; Page 13; 53pp; German.  
 XX  
 CC This invention describes novel oligonucleotide probes used to detect  
 CC contaminant bacteria that may be present in drinking water. The probes  
 CC can detect bacteria (especially Legionella, faecal streptococci and  
 CC coliforms) that may contaminate drinking water in environmental samples  
 CC (water or soil), clinical samples (sputum, biopsies, urine etc.), in  
 CC bathing and drinking water and in foods, pharmaceuticals and cosmetics,  
 CC by in situ hybridisation. The probes combine the advantages of  
 CC fluorescent in situ hybridisation with those of culture methods. Only a  
 CC relatively short culture step is required; analysis takes 24-48 hours  
 CC (contrast many days for conventional methods) and all relevant bacteria  
 CC can be tested simultaneously. The oligonucleotides can differentiate  
 CC between species of the same genus and are easy to use, allowing simple  
 CC analysis of a large number of samples. ABX94532-ABX94578 represent the  
 CC oligonucleotide probes described in the invention  
 XX  
 SQ Sequence 18 BP; 2 A; 6 C; 3 G; 7 T; 0 U; 0 Other;  
 Query Match 16.7%; Score 12.2; DB 1; Length 18;  
 Best Local Similarity 82.4%; Pred. No. 5.6e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 Cyt 932 CCTCTCTCTTCATGGT 948  
 Db 1 CACTCTCTTACTTGGT 17  
 RESULT 146  
 ADB84612/c  
 ID ADB84612 standard; DNA; 18 BP.  
 XX  
 AC ADB84612;  
 XX  
 XX  
 DT 04-DEC-2003 (first entry)  
 XX  
 DE Human mitogen-activated protein kinase kinase 2 primer #12.  
 XX  
 KW antiinflammatory; gene therapy; MEKK2; inflammatory reaction; human;  
 KW mitogen-activated protein kinase kinase 2; sequencing; ss; MEKK2;  
 KW primer.  
 XX  
 XX Homo sapiens.  
 CS  
 XX US2003064496-A1.  
 FN  
 XX  
 PD 03-APR-2003.  
 XX  
 PF 05-JUN-2002; 2002US-00163811.  
 XX  
 PR 05-JUN-2002; 2002US-00163811.  
 XX  
 FA (ATHE-) ATHEROGENICS INC.  
 XX  
 FI Whalen AM, Cook CK, Sikorski JA;  
 XX  
 LR WPI; 2003-540788/51.  
 XX  
 XX New isolated nucleic acid molecule encoding a human MEKK2 protein, useful  
 FT for modulating the activity of the protein, such as regulation of  
 PT inflammatory reactions.  
 PT  
 XX  
 PS Example 1; Page 18; 54pp; English.  
 XX  
 CC The invention describes an isolated nucleic acid molecule comprising a  
 CC 1857 base pair sequence, given in the specification and encoding a MEKK2  
 CC protein or its fragment, or encoding a fusion protein. The nucleic acid  
 CC molecule is useful in modulating the activity of MEKK2 protein, such as  
 CC regulation of inflammatory reactions. The MEKK2 protein is useful in  
 CC identifying a compound that specifically modulates the expression or

CC activity of a non-MEKK2 protein, where lack of expression or activity of  
 CC the MEKK2 protein as compared to the expression or activity of the non-  
 CC MEKK2 protein indicates that the compound specifically modulates the  
 CC expression or activity of the non-MEKK2 protein. This sequence represents  
 CC a sequencing primer used to verify the authenticity of human mitogen-  
 XX activated protein kinase kinase 2 (MEKK2) clones.  
 SQ Sequence 18 BP; 8 A; 3 C; 2 G; 5 T; 0 U; 0 Other;  
 Query Match 16.7%; Score 12.2; DB 1; Length 18;  
 Best Local Similarity 82.4%; Pred. No. 5.6e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 Cyt 937 CTCCTCATTTGGTTTAAAT 953  
 Db 17 CTCGTTATTGGTATAAT 1  
 RESULT 147  
 ADC98654  
 ID ADC98654 standard; DNA; 18 BP.  
 XX  
 AC ADC98654;  
 XX  
 DT 01-JAN-2004 (first entry)  
 XX  
 DE Tobacco rbcL PCR primer 3-rbs.  
 XX  
 KW plant transformation; plant plastid; autonomous replication;  
 KW transgenic plant; plastome; tobacco; ss; primer; PCR; rbcL.  
 XX  
 OS Nicotiana tabacum.  
 XX  
 PN DE10132780-A1.  
 XX  
 PD 16-JAN-2003.  
 XX  
 PF 06-JUL-2001; 2001DE-01032780.  
 XX  
 PR 06-JUL-2001; 2001DE-01032780.  
 XX  
 PA (ICON-) ICON GENETICS AG.  
 XX  
 PI Koop H, Muehlbauer S, Klaus S, Eibl C;  
 XX  
 DR WPI; 2003-343941/33.  
 XX  
 PT Genetic transformation of plant plastids, useful for preparing transgenic  
 PT plants that do not contain a selection marker, also vector for the  
 PT process.  
 XX  
 PS Example 1; Page 11; 26pp; German.  
 XX  
 CC This invention describes a novel method for genetic transformation of  
 CC plant plastids. The method comprises providing a plant cell with DNA (I)  
 CC that (i) contains a sequence that allows autonomous replication in a  
 CC plant cell (ii) contains at least one desired sequence (ii) and (iii) for  
 CC transcription: (a) is free of transcriptional and/or termination control  
 CC elements linked to (ii) or (b) is free of transcriptional termination  
 CC control elements linked to but includes a transcription initiation  
 CC control element linked to (ii). Replication of (I) is induced and  
 CC selection made for plants, or cells, that contain genetically transformed  
 CC plastids. The method is useful for producing transgenic plants (or cells)  
 CC containing a modified plastome but no selection marker, specifically no  
 CC antibiotic resistance gene. The vectors used in the process are not  
 CC species-specific. This sequence represents a PCR primer used to amplify  
 CC the tobacco (Nicotiana tabacum) rbcL ribosome binding site which is used  
 CC in the construction of the plastid vector pICPBL.  
 XX  
 SQ Sequence 18 BP; 2 A; 7 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 16.7%; Score 12.2; DB 1; Length 18;  
 Best Local Similarity 82.4%; Pred. No. 5.6e+02;

```
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
      922 TGCCTTTATCCCTCCT 938
      ||||| |||||
      2 TGCCATGGATCCCTCCT 18

RESULT 148
3139583/c
) ABI39583 standard; DNA; 12 BP.
)
) ABI39583;
)
) 22-FEB-2002 (first entry)
)
) Oligonucleotide primer SEQ ID NO 339556 for detecting SNP TSC0004850.
)
) SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
) peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
) central nervous system; gastrointestinal; respiratory; immune; metabolic.
)
) Homo sapiens.
)
) WO200177384-A2.
)
) 18-OCT-2001.
)
) 06-APR-2001; 2001WO-IB000713.
)
) 07-APR-2000; 2000DE-01019173.
)
) (EPIG-) EPIGENOMICS AG.
)
) Olek A, Piepenbrock C, Berlin K;
)
) WPI; 2001-657177/75.
)
) Set of oligonucleotides, useful for diagnosis and cell typing, is
) designed to detect single-nucleotide polymorphisms and cytosine
) methylation status.
)
) Claim 1; SEQ ID NO 339556; 29pp + Sequence Listing; German.
)
) This invention describes novel oligonucleotide primers or peptide nucleic
) acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
) and cytosine methylation status in chemically pretreated genomic DNA. The
) oligonucleotides are used for diagnosis and/or prognosis of cancer and a
) range of diseases including immune system, gastrointestinal, respiratory,
) central nervous system, cardiovascular and metabolic disorders. The
) oligomers are also used for detecting cell type differentiation. ABC00010
) -ABC99989, ABF0010-ABF99989, ABH0010-ABH99989 and ABI0010-ABI82073
) represent the oligomers described in the invention. NOTE: The sequence
) data for this patent did not form part of the printed specification, but
) was obtained in electronic format from WIPO at
) ftp.wipo.int/pub/published_pct_sequences
)
) Sequence 12 BP; 6 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
)
) Query Match 16.4%; Score 12; DB 1; Length 12;
) Best Local Similarity 100.0%; Pred. No. 4.7e+02;
) Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
)
) 946 GGTTAATGAT 957
) ||||| |||||
) 12 GGTTTAATGAT 1

RESULT 149
3139583/c
) AAX75700 standard; RNA; 15 BP.
)
) AAX75700;
)
```

```
DT 28-JUL-1999 (first entry)
XX Human flt-1 and KDR hammerhead ribozyme target site #34.
DE
XX
XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
XX Homo sapiens.
OS
XX
XX WO9715662-A2.
PN
XX
XX 01-MAY-1997.
PD
XX
XX 25-OCT-1996; 96WO-US017480.
PF
XX
XX 26-OCT-1995; 95US-0005974P.
PR
XX
XX 11-JAN-1996; 96US-00584040.
PR
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX
XX (CHIR ) CHIRON CORP.
PA
XX
XX Favco P, Mcswiggen J, Stinchcomb D, Escobedo J;
PI
XX
XX WPI; 1997-259017/23.
DR
XX
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.
PT
XX
XX Example 9; Page 192; 218pp; English.
PS
XX
XX The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
CC
XX
XX Sequence 15 BP; 2 A; 3 C; 4 G; 0 T; 6 U; 0 Other;
SQ
)
) Query Match 16.4%; Score 12; DB 1; Length 15;
) Best Local Similarity 50.0%; Pred. No. 5.4e+02;
) Matches 6; Conservative 6; Mismatches 0; Indels 0; Gaps 0;
)
) QY 915 TGGTCTTTGCCCT 926
) :|||:|||||:
) Db 2 UGUUCUUUGCCU 13
)
) RESULT 150
) AAZ65580
) ID AAZ65580 standard; DNA; 15 BP.
) XX
) XX AAZ65580;
) AC
) XX
) XX 30-MAR-2000 (first entry)
) DT
) XX
) XX Immunosuppressant inhibitor oligonucleotide VEGF-445.
) DE
) XX
) XX Immunosuppressant inhibitor; transforming growth factor beta; TGF beta;
KW vascular endothelial growth factor; VEGF; interleukin-10; IL-10; cancer;
KW prostaglandin E2; PGE2; immune response; tumour; asthma; Crohn's disease;
KW monocyte chemotactic protein-1; MCP-1; ulcerative colitis; diabetes;
KW glomerulonephritis; acute respiratory distress syndrome; ss;
KW atherosclerosis.
XX
```



OS Unidentified.  
 XX WO9963975-A2.  
 XX 16-DEC-1999.  
 XX 10-JUN-1999; 99WO-EP004013.  
 XX 10-JUN-1998; 98EP-00110709.  
 XX 25-JUN-1998; 98EP-00113974.  
 XX (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.  
 XX Schlingensiepen K, Schlingensiepen R, Brysch W;  
 XX WPI; 2000-097470/08.  
 XX Composition containing immune stimulant and inhibitor of agent that  
 XX adversely affects the immune response, for treating cancers and  
 XX infections.  
 XX Claim 10; Fig 1; 30pp; English.  
 XX This sequence is an immunosuppressant inhibitor oligonucleotide, which is  
 XX used in the invention. The invention relates to a composition which  
 XX contains at least one inhibitor (less than 100 kD) of a substance (e.g.  
 XX transforming growth factor TGF-beta, vascular endothelial growth factor  
 XX VEGF, interleukin-10 IL-10, prostaglandin E2 PGE2, or their receptors)  
 XX that adversely affects the immune response. The composition also includes  
 XX at least one stimulant that positively affects the immune response. This  
 XX oligonucleotide is an example of an inhibitor that is used in the  
 XX composition. The composition is used as an immunostimulant for the  
 XX treatment of neoplasms and infections, particularly hyperproliferation;  
 XX leukaemia; (non-)Hodgkin's lymphoma; carcinoma (of oesophagus, bronchi,  
 XX colon-rectum, stomach, intestine, gall bladder or duct, pancreas, anus,  
 XX breast, ovary, cervix, endometrium, prostate or bladder), liver tumours,  
 XX malignant melanoma, brain tumours and sarcomas. The oligonucleotides,  
 XX most of which are directed against TGFbeta or VEGF, are inhibitors of  
 XX monocyte chemotactic protein-1 (MCP-1) and are useful as anti-  
 XX inflammatory for treating e.g. asthma, Crohn's disease, ulcerative  
 XX colitis, diabetes, glomerulonephritis, acute respiratory distress  
 XX syndrome and the formation of atherosclerotic plaque  
 XX Sequence 15 BP; 0 A; 4 C; 3 G; 8 T; 0 U; 0 Other;  
 XX  
 XX Query Match 16.4%; Score 12; DB 1; Length 15;  
 XX Best Local Similarity 100.0%; Pred. No. 5.4e+02;  
 XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 XX  
 XX QY 909 TTTCTTTGGTCT 920  
 XX |||||  
 XX Db 2 TTTCTTTGGTCT 13  
 XX  
 XX RESULT 151  
 XX AAF48241  
 XX ID AAF48241 standard; DNA; 15 BP.  
 XX AC AAF48241;  
 XX 30-MAR-2001 (first entry)  
 XX IGFBP3 oligonucleotide #1661.  
 XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 XX skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;  
 XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 XX hyperneovascular condition; hyperplasia; kidney disease;  
 XX neovascular condition of the retina; ss.

OS Homo sapiens.  
 XX WO200078341-A1.  
 XX 28-DEC-2000.  
 XX 21-JUN-2000; 2000WO-AU000693.  
 XX 21-JUN-1999; 99US-0140345P.  
 XX (MURD-) MURDOCH CHILDRENS RES INST.  
 XX Wraight CJ, Werther GA, Edmondson SR;  
 XX WPI; 2001-041421/05.  
 XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 XX inhibits or reduces growth factor mediated cell proliferation and/or  
 XX inflammation.  
 XX Example 7; Page 55; 201pp; English.  
 XX The present invention relates to a method for ameliorating the effects of  
 XX skin disorders. The method comprises contacting the skin with an  
 XX antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 XX receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 XX inhibiting or reducing growth factor mediated cell proliferation,  
 XX inflammation and/or other disorders. The present sequence is an  
 XX oligonucleotide which can be used to design the antisense  
 XX oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 XX F45161). The method is useful for ameliorating the effects of psoriasis,  
 XX ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 XX neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 XX hyperneovascular condition such as a neovascular condition of the retina,  
 XX brain or skin, growth factor-mediated malignancies, other sclerotic  
 XX disease, kidney disease, hyperproliferation of the inside of blood  
 XX vessels or any other hyperplasia  
 XX Sequence 15 BP; 2 A; 7 C; 2 G; 4 T; 0 U; 0 Other;  
 XX  
 XX Query Match 16.4%; Score 12; DB 1; Length 15;  
 XX Best Local Similarity 100.0%; Pred. No. 5.4e+02;  
 XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 XX  
 XX QY 932 CCCTCCTCTTCA 943  
 XX |||||  
 XX Db 1 CCCTCCTCTTCA 12  
 XX  
 XX RESULT 152  
 XX AAF48238  
 XX ID AAF48238 standard; DNA; 15 BP.  
 XX AC AAF48238;  
 XX 30-MAR-2001 (first entry)  
 XX IGFBP3 oligonucleotide #1658.  
 XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 XX skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;  
 XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 XX hyperneovascular condition; hyperplasia; kidney disease;  
 XX neovascular condition of the retina; ss.  
 XX Homo sapiens.  
 XX WO200078341-A1.  
 XX

```

28-DEC-2000.
21-JUN-2000; 2000WO-AU000693.
21-JUN-1999; 99US-0140345P.
(MURD-) MURDOCH CHILDRENS RES INST.
Wright CJ, Werther GA, Edmondson SR;
WPI; 2001-041421/05.
Ameliorating the effects of a disorder, e.g. psoriasis, by administering
UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
inhibits or reduces growth factor mediated cell proliferation and/or
inflammation.
Example 7; Page 55; 201pp; English.
The present invention relates to a method for ameliorating the effects of
skin disorders. The method comprises contacting the skin with an
antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
inhibiting or reducing growth factor mediated cell proliferation,
inflammation and/or other disorders. The present sequence is an
oligonucleotide which can be used to design the antisense
oligonucleotides of the present invention (see AAF45151 and AAF45153-
F45161). The method is useful for ameliorating the effects of psoriasis,
ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
hyperneovascular condition such as a neovascular condition of the retina,
brain or skin, growth factor-mediated malignancies, other sclerotic
disease, kidney disease, hyperproliferation of the inside of blood
vessels or any other hyperplasia
Sequence 15 BP; 1 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 16.4%; Score 12; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 5.4e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

932 CCTCTCTCTCA 943
|||||
4 CCTCTCTCTCA 15

RESULT 153
AAF48239
AAF48239 standard; DNA; 15 BP.
AAF48239;
30-MAR-2001 (first entry)
IGFBP3 oligonucleotide #1659.
Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
hyperneovascular condition; hyperplasia; kidney disease;
neovascular condition of the retina; ss.
Homo sapiens.
WO200078341-A1.
28-DEC-2000.
21-JUN-2000; 2000WO-AU000693.
21-JUN-1999; 99US-0140345P.
(MURD-) MURDOCH CHILDRENS RES INST.

```



angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAX67275 to AAX75752 represent specific examples of nucleic acid molecules from the present invention

Sequence 17 BP; 4 A; 3 C; 4 G; 0 T; 6 U; 0 Other;

Query Match 16.4%; Score 12; DB 1; Length 17;  
Best Local Similarity 50.0%; Pred. No. 5.9e+02;  
Matches 6; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

915 TGGTCTTTGCGCT 926  
:||||:||||:  
3 UGGUCUUUGCCU 14

RESULT 157

AX68751

AAX68751 standard; RNA; 17 BP.

AAX68751;

28-JUL-1999 (first entry)

Human flt1 VEGF receptor hammerhead ribozyme substrate #46.

Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor; foetal liver kinase 1; ss.

Homo sapiens.

WO9715662-A2.

01-MAY-1997.

25-OCT-1996; 96WO-US017480.

26-OCT-1995; 95US-0005974P.

11-JAN-1996; 96US-00584040.

(RIBO-) RIBOZYME PHARM INC.

(CHIR) CHIRON CORP.

Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;

WPI; 1997-259017/23.

Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.

Claim 4; Page 48; 218pp; English.

The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAX67275 to AAX75752 represent specific examples of nucleic acid molecules from the present invention

Sequence 17 BP; 4 A; 3 C; 4 G; 0 T; 6 U; 0 Other;

Query Match 16.4%; Score 12; DB 1; Length 17;  
Best Local Similarity 50.0%; Pred. No. 5.9e+02;  
Matches 6; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

QY 915 TGGTCTTTGCGCT 926  
:||||:||||:  
Db 2 UGGUCUUUGCCU 13

RESULT 158

ACC65172

ID ACC65172 standard; DNA; 17 BP.

AC ACC65172;

01-JUL-2003 (first entry)

Murine oligonucleotide associated with tumour suppression, SEQ ID 2419.

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; ss.

Mus musculus.

WO2003025176-A2.

27-MAR-2003.

17-SEP-2002; 2002WO-IB004210.

17-SEP-2001; 2001PR-00011979.

(MOLE-) MOLECULAR ENGINES LAB.

Telerman A, Amson R, Tuijnder M;

WPI; 2003-333167/31.

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

Disclosure; Page 313; 738pp; French.

The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development and/or treatment of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia

Sequence 17 BP; 3 A; 3 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 16.4%; Score 12; DB 1; Length 17;

Best Local Similarity 100.0%; Pred. No. 5.9e+02;

Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 900 CCGTGTCAATTT 911

|||||

4 CCGTGTCAATTT 15

RESULT 159

AAZ30575/C

ID AAZ30575 standard; DNA; 18 BP.

AC AAZ30575;

18-JAN-2000 (first entry)

Human integrin alpha 4 gene antisense oligonucleotide ISIS #24459.

```

XX Human; integrin; antisense; oligonucleotide; inhibition; expression;
KW very late antigen; CD49d; CD23; cell surface; leucocyte; adhesion;
KW vascular endothelial cell; vascular endothelium; migration; inflammation;
KW atherosclerosis; allergy; asthma; rheumatoid arthritis; tumor;
KW metacastasis; circulatory system; autoimmune disease; Grave's disease;
KW Hashimoto's thyroiditis; encephalomyelitis; multiple sclerosis; ss.
XX Synthetic.
OS Homo sapiens.
OS US5968826-A.
XX 19-OCT-1999.
XX 05-OCT-1998; 98US-00166203.
XX 05-OCT-1998; 98US-00166203.
XX (ISIS-) ISIS PHARM INC.
XX Bennett CF, Cowsett LM, Condon TP;
XX WPI; 1999-590416/50.
XX Antisense inhibition of integrin alpha4 expression useful for treating
XX inflammatory diseases such as atherosclerosis, allergies, asthma and
XX arthritis.
XX Example 8; Col 25; 40pp; English.
XX The invention relates to the generation of antisense oligonucleotides
XX targeted to the integrin alpha4 gene (human sequence AAZ30555) which are
XX used for inhibiting expression of the integrin alpha4 mRNA or protein.
XX The oligonucleotides AAZ30556-Z30594 are used to inhibit human integrin
XX alpha4 protein expression. Integrin alpha4 is a component of Very Late
XX Antigen (VLA)-4 (also called alpha4beta1 and CD49d/CD29). VLA-4 is
XX expressed on the cell surfaces of leucocytes and vascular endothelial
XX cells and mediates the adhesion of leucocytes to the vascular endothelium
XX prior to migration into the surrounding tissues. This migration is an
XX essential step in inflammation and hence VLA-4 (and consequently integrin
XX alpha4) is a potential therapeutic target for treating inflammatory
XX diseases and the damaging effects of excessive inflammation. These
XX disorders include atherosclerosis, allergies, asthma, rheumatoid
XX arthritis and tumor cell metastasis (VLA-4 is involved in migration of
XX the tumor cells through the extracellular matrix into the circulatory
XX system). VLA-4 is also involved in a number of autoimmune diseases such
XX as Grave's disease, Hashimoto's thyroiditis, encephalomyelitis (EAE),
XX multiple sclerosis. VLA-4 may also be involved in promoting adhesion
XX (i.e. retention) of hematopoietic stem cells in bone-marrow and in
XX allograft rejection
XX
XX Query Match 16.4%; Score 12; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 6.1e+02;
XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Cy 901 CTGGTCATTTC 912
XX Db 12 CTGGTCATTTC 1
XX
XX RESULT 160
XX AAS10237/c
XX ID AAS10237 standard; DNA; 18 BP.
XX AC AAS10237;
XX
XX 24-OCT-2001 (first entry)
XX DE Antisense oligonucleotide for human integrin alpha 4, ISIS 24459.
XX

```

```

KW Integrin alpha 4; antisense; very late antigen 4; VLA4;
KW autoimmune disease; inflammatory disease; rheumatoid arthritis;
KW multiple sclerosis; tumor metastasis; melanoma; asthma; psoriasis;
KW allergy; Grave's disease; Hashimoto's thyroiditis; oligonucleotide;
XX systemic lupus erythematosus; allograft rejection; ISIS 24459; ss.
OS Homo sapiens.
OS Synthetic.
XX Key Location/Qualifiers
FH modified_base 1..18
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Other= all cytosines are 5-methyl cytosine"
FT modified_base 1..18
FT /*tag= b
FT /mod_base= OTHER
FT /note= "Other= Phosphorothioate backbone"
FT modified_base 1..4
FT /*tag= c
FT /mod_base= OTHER
FT /note= "Other= 2' methoxyethoxy residues"
FT modified_base 5..14
FT /*tag= d
FT /mod_base= OTHER
FT /note= "Other= 2' deoxy residues"
FT modified_base 15..18
FT /*tag= e
FT /mod_base= OTHER
FT /note= "Other= 2' methoxyethoxy residues"
XX
XX US6258790-B1.
XX 10-JUL-2001.
XX 19-AUG-1999; 99US-00377309.
XX 05-OCT-1998; 98US-00166203.
XX (ISIS-) ISIS PHARM INC.
XX Bennett CF, Condon TP, Cowsett LM;
XX WPI; 2001-450381/48.
XX Composition for treating inflammatory and autoimmune diseases, comprises
XX antisense compound targeted to nucleic acid molecule encoding integrin
XX alpha4 and inhibit expression of integrin alpha4.
XX Example 8; Col 25; 49pp; English.
XX The sequence is an antisense oligonucleotide targeting human integrin 4,
XX a protein involved in autoimmune and inflammatory diseases. The invention
XX relates to antisense inhibitors of integrin alpha 4 which target and
XX inhibit expression of integrin alpha 4. The antisense molecules are
XX useful for inhibiting the expression of integrin alpha4 in human cells or
XX tissues, treating an animal having a disease or condition associated with
XX expression of integrin alpha4, e.g., inflammatory disease or condition,
XX autoimmune disease or condition including rheumatoid arthritis, multiple
XX sclerosis and tumor metastases, melanoma, asthma, psoriasis, allergy,
XX Grave's disease, Hashimoto's thyroiditis, systemic lupus erythematosus
XX and allograft rejection, and diseases or conditions characterised by
XX leukocyte migration into affected tissues, preferably central nervous
XX system tissues. The antisense molecules are also useful for reducing the
XX levels of VLA-4 and alpha4beta7 integrin in human cells or tissues, and
XX reducing the adherence of cells of a first type e.g., melanoma cells or
XX lymphocytes, to cells of a second type e.g., endothelial cells, by
XX inhibiting integrin alpha4 expression and thus decreasing adhesion of
XX cells
XX
XX Sequence 18 BP; 7 A; 5 C; 4 G; 2 T; 0 U; 0 Other;
XX Query Match 16.4%; Score 12; DB 1; Length 18;

```

Best Local Similarity 100.0%; Pred. No. 6.1e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

7 901 CTGGTCATTTTC 912  
12 CTGGTCATTTTC 1

RESULT 161  
AAV48734  
AAV48734 standard; DNA; 15 BP.

AAV48734;  
15-OCT-1998 (first entry)  
ErbB-2 gene antisense oligonucleotide ErbB-2-26.  
ErbB-2; antisense oligonucleotide; modulate; gene expression; ss.  
Synthetic.  
Homo sapiens.  
EP856579-A1.  
05-AUG-1998.  
31-JAN-1997; 97EP-00101531.  
31-JAN-1997; 97EP-00101531.  
(BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.  
Schlingensiepen K, Brysch W;  
WPI; 1998-400910/35.  
Preparation of antisense oligonucleotide(s) which lack long runs of consecutive guanosine or inosine - and have specific ratio of residues able to form two or three hydrogen bonds, have greater activity and reduced toxicity, used therapeutically or to modulate growth of cells in culture.

Claim 10; Fig 6a; 286pp; English.

AAV48709-886 represent antisense oligonucleotides directed against the ErbB-2 gene. Of these, only oligonucleotides AAV48709-91 resulted in significant reduction in ErbB-2 protein expression, while oligonucleotides AAV48792-886 had little effect. The oligonucleotides exemplify the invention. The specification describes oligonucleotides that contain 8-30 nucleotides, which contain at most 8 nucleotides that can each form three hydrogen bonds to cytosine; do not contain four consecutive nucleotides able to form three H-bonds each to four consecutive cytosines; do not contain two sequences of three consecutive nucleotides each able to form three H-bonds to three consecutive cytosines, and the ratio between residues able to form two H-bonds each (2R) or three such bonds (3R) is given by  $2R/3R = 0.33-0.72$ . The oligonucleotides are used to modulate expression of genes, particularly the genes for p53, ErbB-2, junB, junD, TGF-beta 1 or beta 2 to control proliferation of primary cell cultures (e.g. bone marrow stem, liver or kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The oligonucleotides can also be used to analyse function of proteins (by altering their expression or activity) and therapeutically, e.g. in cases of cancer or (targeting TGF) for stimulating the immune system

Sequence 15 BP; 2 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 16.2%; Score 11.8; DB 1; Length 15;  
Best Local Similarity 86.7%; Pred. No. 5.8e+02;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

933 CCTCTCTCTTCATGG 947  
|||||

Db 1 CCTCTCTCTTCAGAGG 15

RESULT 162  
AAF52178/C  
AAF52178 standard; DNA; 15 BP.

XX  
AC AAF52178;  
XX  
DT 30-MAR-2001 (first entry)  
XX  
DE IGF-I oligonucleotide #3138.  
XX  
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200078341-A1.  
XX  
PD 28-DEC-2000.  
XX  
PF 21-JUN-2000; 2000WO-AU000693.  
XX  
PR 21-JUN-1999; 99US-0140345P.  
XX  
PA (MURD-) MURDOCH CHILDRENS RES INST.  
XX  
PI Wright CJ, Werther GA, Edmondson SR;  
XX  
DR WPI; 2001-041421/05.  
XX  
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.  
XX  
PS Example 8; Page 81; 201pp; English.  
XX  
CC The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, ptyriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia  
XX  
SQ Sequence 15 BP; 8 A; 2 C; 2 G; 3 T; 0 U; 0 Other;  
Query Match 16.2%; Score 11.8; DB 1; Length 15;  
Best Local Similarity 86.7%; Pred. No. 5.8e+02;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGGTTTAATG 954  
|||||  
Db 15 TTCACGTGTTTAATG 1  
|||||

RESULT 163







PT rheumatoid arthritis, etc., in a human patient.

XX Claim 4; Page 59; 218pp; English.

XX The present invention describes nucleic acid molecules which modulate the

CC synthesis, expression and/or stability of a mRNA encoding 1 or more

CC receptors of vascular endothelial growth factor (VEGF). A patient

CC (preferably human) having a condition associated with the level of the

CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing

CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour

CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be

CC treated by administering the nucleic acid molecule or the expression

CC vector to the patient. AAX67275 to AAX75752 represent specific examples

CC of nucleic acid molecules from the present invention

XX

SQ Sequence 17 BP; 3 A; 8 C; 0 G; 0 T; 6 U; 0 Other;

Query Match 16.2%; Score 11.8; DB 1; Length 17;

Best Local Similarity 53.3%; Pred. No. 6.3e+02;

Matches 8; Conservative 5; Mismatches 2; Indels 0; Gaps 0;

QY 924 CCTTTTATCCTCTCT 938

DB 3 CCUAUUAACCCUCCU 17

RESULT 168

AAV11899

ID AAV11899 standard; DNA; 17 BP.

AC AAV11899;

XX

DT 13-AUG-1998 (first entry)

XX

DE L. lactis NS3 locus PCR primer NS3-10.

XX

KW Salt-inducible promoter; lactic acid; food industry; food-grade inducer;

KW fermentation processes; cheese production; PCR primer; ss.

XX

CS Synthetic.

CS Lactococcus lactis.

XX

XX WO9810080-A1.

XX

DD 12-MAR-1998.

XX

XX 20-AUG-1997; 97WO-EP004755.

XX

FR 05-SEP-1996; 96EP-00202444.

FR 13-MAR-1997; 97EP-00200744.

XX

PA (UNIL ) UNILEVER NV.

PA (UNIL ) UNILEVER PLC.

XX

PI Sanders JW, Kok J, Venema G, Ledebroer AM;

XX

DR WPI; 1998-193629/17.

XX

FT Salt-inducible promoter - derived from lactic acid bacteria, used for the

FT production of polypeptides in food.

XX

PS Disclosure; Page 16; 111pp; English.

XX

CC AAV11892-V11900 are PCR primers used in the identification and isolation

CC of a salt-inducible promoter (SIP) derived from the lactic acid bacterium

CC Lactococcus lactis. Using the SIP, salt can be used as a food-grade

CC inducer in food fermentation processes, e.g. in the production of cheese,

CC dressings, water-containing spreads, sausages, or sour dough

XX

SQ Sequence 17 BP; 2 A; 4 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 16.2%; Score 11.8; DB 1; Length 17;

Best Local Similarity 86.7%; Pred. No. 6.3e+02;

Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 936 CCTTTCATTCGTTT 950

DB 1 CCGCTTCAATGTTT 15

RESULT 169

AAAZ1146

ID AAZ1146 standard; RNA; 17 BP.

XX

AC AAZ1146;

XX

DT 19-JUN-2000 (first entry)

XX

DE Integrin alpha 6 subunit substrate sequence SEQ ID NO:4372.

XX

KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;

KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;

KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;

KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;

KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;

KW age related macular degeneration; inflammation; neovascular glaucoma;

KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;

KW tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome;

KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.

XX

OS Homo sapiens.

XX

XX WO9950403-A2.

XX

PD 07-OCT-1999.

XX

PF 24-MAR-1999; 99WO-US006507.

XX

FR 27-MAR-1998; 98US-0079678P.

XX

PA (RIBO-) RIBOZYME PHARM INC.

XX

PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Meswiggen JA;

XX

DR WPI; 1999-591315/50.

XX

PT Novel ribozymes for modulating the synthesis, expression and/or stability

PT of an mRNA encoding an angiogenic factors.

XX

PS Claim 55; Page 190; 305pp; English.

XX

CC The present invention describes enzymatic nucleic acid molecules with RNA

CC cleaving activity, which specifically cleave RNA encoded by an aryl

CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3

CC gene, an integrin alpha 6 subunit gene, or a tie-2 gene. AAL16775 to

CC AAL17167 and AAL17561 to AAL17622 represent ribozyme sequences for ARNT,

CC and AAL17168 to AAL17560 and AAL17623 to AAL17684 represent their

CC corresponding target sequences: AAL17685 to AAL18385 and AAL19087 to

CC AAL19154 represent ribozyme sequences for Tie-2, and AAL18386 to AAL19086

CC and AAL19155 to AAL19222 represent their corresponding target sequences;

CC AAL19223 to AAL20361 and AAL21501 to AAL21595 represent ribozyme

CC sequences for integrin alpha 6 subunit, and AAL20362 to AAL21500 and

CC AAL21596 to AAL21688 represent their corresponding target sequences;

CC AAL21689 to AAL22475 and AAL23263 to AAL23342 represent ribozyme sequence

CC for integrin subunit beta 3, and AAL22476 to AAL23262, AAL23343 to

CC AAL23422 represent their corresponding target sequences. The ribozymes of

CC the invention are used for modulating the synthesis, expression and/or

CC stability of an mRNA encoding angiogenic factor, especially ARNT,

CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are

CC especially used to treat cancer, diabetic retinopathy, age related

CC macular degeneration (ARMD), inflammation, and arthritis, as well as

CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,

CC angiofibroma of tuberosus sclerosis, pot-wine stains, Sturge Weber

CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,

CC and other syndromes and diseases related to the levels of ARNT, Tie-2,

CC integrin subunit alpha-6, or integrin subunit beta-3

CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,  
CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber  
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,  
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,  
CC integrin subunit alpha-6, or integrin subunit beta-3  
XX  
SQ Sequence 17 BP; 5 A; 2 C; 3 G; 0 T; 7 U; 0 Other;

Query Match 16.2%; Score 11.8; DB 1; Length 17;  
Best Local Similarity 40.0%; Pred. NO. 6.3e-02;  
Matches 6; Conservative 7; Mismatches 2; Indels 0; Gaps 0

QY 944 TTGGCTTTAAATGATC 958  
Db 2 UUGGUUUAACAAC 16

RESULT 171  
AAV93544  
ID AAV93544 standard; RNA; 17 BP.  
XX  
AC AAV93544;  
XX  
XX DT DT  
XX  
XX 18-FEB-1999 (first entry)  
DE Human B-raf substrate nucleotide position 1603.  
XX  
XX Human; C-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;  
KW target; substrate; catalyst; modulation; expression; Raf gene; delivery;  
KW screening; identification; synthesis; deprotection; purification; cancer;  
KW inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;  
KW restenosis; rheumatoid arthritis; ss.  
XX  
XX Homo sapiens.  
OS  
XX  
XX W09805030-A2.  
FN  
XX  
XX 12-NOV-1998.  
PD  
XX  
XX 05-MAY-1998; 98WO-US009249.  
PF  
XX  
XX 09-MAY-1997; 97US-0046059P.  
PR  
XX 09-JUN-1997; 97US-0049002P.  
PR  
XX 03-JUL-1997; 97US-0051718P.  
PR  
XX 22-AUG-1997; 97US-0056808P.  
PR  
XX 02-OCT-1997; 97US-0061321P.  
PR  
XX 02-OCT-1997; 97US-0061324P.  
PR  
XX 05-NOV-1997; 97US-0064866P.  
PR  
XX 19-DEC-1997; 97US-0068212P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
PA  
XX  
XX Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K, Bellon L;  
PI Parry T, Beigelman L, Meswigen JA, Karpeisky A, Burgin A;  
PI Thompson J, Workman Ct, Beaudry A, Sweedler D;  
XX  
XX WPI; 1999-009494/01.  
DR  
XX  
XX Identifying new catalytic nucleic acid that modulates selected processes  
PT - especially ribozymes that cleave Raf RNA for treating cancer,  
PT restenosis, and also new ribozymes and modified nucleoside triphosphates  
PT used as antiviral agents and synthons.  
XX  
XX Claim 177; Page 169; 259pp; English.  
PS  
XX  
XX A method has been developed for the identification of a nucleic acid  
CC capable of modulating a process in a biological system. The method  
CC comprises: (a) introducing into the system a random library of nucleic  
CC acid catalysts (NAC) having a substrate binding domain (SBD), comprising  
CC a random sequence, and a catalytic domain (CD); and (b) identifying NAC  
CC in systems where modulation has occurred and/or determining the sequence  
CC of at least part of the SBDs in such systems. Nucleic acid molecules with  
CC endonuclease activity and catalytic activity, from the present invention,  
CC

CC are used to modulate gene expression in plant and mammalian cells and to  
 CC cleave target nucleic acid, particularly for treating systemic diseases  
 CC caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic  
 CC ascites and infection. They may also be used to detect genetic drift and  
 CC mutations in diseased cells and to determine c-raf RNA. Specifically NACs  
 CC with RNA-cleaving activity that modulate expression of the Raf gene, are  
 CC used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or  
 CC generally any condition associated with the level of c-raf. Introduction  
 CC of sugar/phosphate modifications increases stability against nuclease and  
 CC activity. AAV90922 to AAV93877 represent NACs that can be used in the  
 CC method, specifically for modulating the expression of a Raf gene  
 XX  
 SQ Sequence 17 BP; 3 A; 5 C; 3 G; 0 T; 6 U; 0 Other;

Query Match 16.2%; Score 11.8; DB 1; Length 17;  
 Best Local Similarity 53.3%; Pred. No. 6.3e+02;  
 Matches 8; Conservative 5; Mismatches 2; Indels 0; Gaps 0;

Qy 933 CCTCTCTTCATTGG 947  
 ||:|:|:|:|:  
 Db 3 CCACUCCUUAUGGG 17

RESULT 173  
 AAX32865/c  
 ID AAX32865 standard; DNA; 17 BP.

XX AC AAX32865;  
 XX XX 27-AUG-2003 (revised)  
 DT DE 20-MAR-2003 (revised)  
 DT DE 28-JUN-1999 (first entry)  
 XX XX  
 DE HBV pre-S gene promoter fragment binding TFO B4.  
 XX  
 KW Triplex-forming oligonucleotide; TFO; promoter region; pre-S gene;  
 KW inhibition; hepatitis B virus; HBV adr subtype; DR region; ss.  
 XX  
 CS Synthetic.  
 OS Hepatitis B virus.

XX Key Location/Qualifiers  
 FH 17  
 FT misc\_feature /\*tag= a  
 FT /\*note= "optional monophosphorylation (claim 2) "  
 PT  
 XX W09920641-A1.  
 PN  
 XX 29-APR-1999.  
 PD  
 XX 19-OCT-1998; 98WO-CN000248.  
 PF  
 XX 21-OCT-1997; 97CN-00106667.  
 FR  
 XX (SHAN-) SHANGHAI INST BIOCHEMISTRY CHINESE ACAD.

XX Lu C;  
 XX WPI; 1999-288270/27.  
 DR  
 XX Triplex-forming oligonucleotides, useful for, e.g. inhibition of  
 PT hepatitis B virus (HBV).  
 IT  
 XX Claim 1, 2; Page 22; 39pp; Chinese.  
 FS  
 XX The invention provides triplex-forming oligonucleotides (TFO) and their  
 CC modified derivatives. TFO B1-B5 (AAX32862-866) can bind with the promoter  
 CC region of pre-S gene in inhibition of hepatitis B virus (HBV) adr subtype  
 CC and TFO B11, B12 and B15 (AAX32869-870) can bind with DR region of HBV.  
 CC The oligonucleotides are useful for inhibition of HBV and as drug in  
 CC treatment of hepatitis B. Since the length of the oligonucleotides can be  
 CC suitably increased, the stability and specificity of the formed triplex  
 CC DNA with 2 similar homopoly purine/homopoly pyrimidine fragments are

CC higher. Triplex formation is specifically targeting on the HBV gene  
 CC expression, DNA replication and reproduction, or to produce (DNA)2:RNA  
 CC hybrid triplex with target sequence of RNA in stopping RNA reverse  
 CC transcription, so there is little effect on the human cells. Such  
 CC oligonucleotides are chemically modified by 3'-terminal  
 CC monophosphorylation, leading to more significant inhibition due to their  
 CC higher stability, and the degradation products of the modified  
 CC oligonucleotides are not toxic to the body. (Updated on 20-MAR-2003 to  
 CC correct DR field.) (Updated on 27-AUG-2003 to correct OS field.)  
 XX  
 SQ Sequence 17 BP; 6 A; 0 C; 11 G; 0 T; 0 U; 0 Other;

Query Match 16.2%; Score 11.8; DB 1; Length 17;  
 Best Local Similarity 86.7%; Pred. No. 6.3e+02;  
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 931 TCCCTCCTCTTCATT 945  
 |||||:|:|:|:  
 Db 15 TCCCTCCTCTCTCTT 1

RESULT 173  
 AAF07400  
 ID AAF07400 standard; DNA; 17 BP.

XX AC AAF07400;  
 XX XX 16-FEB-2001 (first entry)  
 DT DE Hammerhead ribozyme substrate #3657.  
 DE Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
 KW interferon alpha; ss.  
 KW  
 XX Homo sapiens.  
 OS  
 XX W0200061729-A2.  
 PN  
 XX 19-OCT-2000.  
 PD  
 XX 11-APR-2000; 2000WO-US009721.  
 PF  
 XX 12-APR-1999; 99US-0129390P.  
 PR  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA  
 XX Blatt L, Zwick M, Pavco P, Meswiggen J;  
 PI  
 XX WPI; 2000-647423/62.  
 DR  
 XX Enzymatic and antisense nucleic acid inhibition of repressor genes,  
 PT useful for producing e.g. granulocyte colony stimulating factor protein,  
 PT interferon alpha and erythropoietin.  
 XX  
 PS Claim 54; Page 139; 164pp; English.

XX The present invention relates to enzymatic and antisense nucleic acid  
 CC molecules that act as inhibitors of the expression of repressor genes  
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
 CC factor gene, IRF-2 and/or the CAAT Displacement Protein (CDP).  
 CC Inhibition of the repressors removes prevents inhibition (and  
 CC consequently increases expression of) genes involved in the production of  
 CC erythropoietin, granulocyte colony stimulating factor protein and  
 CC interferon alpha  
 XX  
 SQ Sequence 17 BP; 0 A; 6 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 16.2%; Score 11.8; DB 1; Length 17;  
 Best Local Similarity 86.7%; Pred. No. 6.3e+02;  
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 919 CTTTGCCTTTTATCC 933  
 |||||:|:|:|:  
 CC

```

1 CTTGCTTGTGTC 15
RESULT 174
BK03416
ABK03416 standard; RNA; 17 BP.
ABK03416;
12-MAR-2002 (first entry)
Human CD20 G-cleaver #31.
Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
DNAzyme; inozyme; G-cleaver; amberzyme; zinczyme; lymphoma; leukaemia;
B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
inflammatory arthropathy; central nervous system injury;
cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
Parkinson's disease; ataxia; Huntington's disease;
Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
Homo sapiens.
Synthetic.
WO200159103-A2.
16-AUG-2001.
09-FEB-2001; 2001WO-US004273.
11-FEB-2000; 2000US-0181797P.
28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
(RIBO-) RIBOZYME PHARM INC.
(BLAT/) BLATT L.
(MCSW/) MCSWIGGEN J.
(CHOW/) CHOWRIRA B M.
Blatt L, Mcswiggen J, Chowrira BM;
WPI; 2001-607195/69.
Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
constructs, which down regulate expression of a CD20 gene or neurite
growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
central nervous system injury.
Claim 30; Page 152; 200pp; English.
The invention relates to a nucleic acid molecule which down regulates
expression of a CD20 gene and a nucleic acid molecule which down
regulates expression of a neurite growth inhibitor gene (NOGO). The
nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
DNAzyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule
possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or
an amberzyme (cleaving RNA with an NGN triplet), a zinczyme (cleaving RNA
with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA
of CD20 in the presence of a divalent cation that is preferably Mg2+.
Furthermore, it may be contacted with a cell to reduce CD20 activity of
the cell and treat a patient having a condition associated with the level
of CD20. The treatment may further comprise the use of one or more
therapies. In particular, the CD20 targeting nucleic acid may be used to
treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-

```

```

CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg2+. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NOGO-targeting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is a G-cleaver molecule of the invention
XX
SQ Sequence 17 BP; 1 A; 5 C; 2 G; 0 T; 9 U; 0 Other;
Query Match 16.2%; Score 11.8; DB 1; Length 17;
Best Local Similarity 33.3%; Pred. No. 6.3e+02;
Matches 5; Conservative 8; Mismatches 2; Indels 0; Gaps 0;
QY 915 TGGTCTTGTGCTTTT 929
Db 1 UGAUCUUGCCUUCU 15
RESULT 175
ABK02836
ID ABK02836 standard; RNA; 17 BP.
XX
AC ABK02836;
XX
DT 12-MAR-2002 (first entry)
XX
DE Human CD20 Hammerhead ribozyme #135.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNAzyme; inozyme; G-cleaver; amberzyme; zinczyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US004273.
XX
PR 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
XX
PI Blatt L, Mcswiggen J, Chowrira BM;
WPI; 2001-607195/69.
XX
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and

```

PT central nervous system injury.

PS Claim 30; Page 142; 200pp; English.

XX The invention relates to a nucleic acid molecule which down regulates

XX expression of a CD20 gene and a nucleic acid molecule which down

XX regulates expression of a neurite growth inhibitor gene (NOGO). The

XX nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a

XX DNzyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule

XX possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr

XX an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA

XX with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA

XX of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.

XX Furthermore, it may be contacted with a cell to reduce CD20 activity of

XX the cell and treat a patient having a condition associated with the level

XX of CD20. The treatment may further comprise the use of one or more

XX therapies. In particular, the CD20-targeting nucleic acid may be used to

XX treat central nervous system (CNS) injury and cerebrovascular accident

XX (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),

XX chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),

XX parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob

XX disease, muscular dystrophy, and/or other neurodegenerative disease

XX states which respond to the modulation of NOGO expression. The present

XX sequence is a hammerhead ribozyme of the invention

XX

SQ Sequence 17 BP; 1 A; 5 C; 3 G; 0 T; 8 U; 0 Other;

Query Match 16.2%; Score 11.8; DB 1; Length 17;

Best Local Similarity 33.3%; Pred. No. 6.3e+02;

Matches 5; Conservative 8; Mismatches 2; Indels 0; Gaps 0;

QY 915 TGGTCTTTCCTTT 929

Db 3 UGAUCUUUGCCUUCU 17

RESULT 176

ABK02837

ID ABK02837 standard; RNA; 17 BP.

AC ABK02837;

XX

XX 12-MAR-2002 (first entry)

XX

XX Human CD20 Hammerhead ribozyme #136.

XX

XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;

XX cerebroprotective; nootropic; neuroprotective; antiparkinsonian;

XX Muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;

XX DNzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;

XX B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;

XX human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;

XX MCL; immunocyto; IMC; immune thrombocytopaenia; stroke; dementia;

XX inflammatory arthropathy; central nervous system injury;

XX cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;

XX chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;

XX Parkinson's disease; ataxia; Huntington's disease;

XX Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

OS Homo sapiens.

OS Synthetic.

XX

PN WO200159103-A2.

XX

PD 16-AUG-2001.

XX

XX 09-FEB-2001; 2001WO-US004273.

XX

XX 11-FEB-2000; 2000US-0181797P.

XX

PR 28-FEB-2000; 2000US-0185516P.

PR

PR 06-MAR-2000; 2000US-0187128P.

XX

XX (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MCSW/) MCSWIGGEN J.

PA (CHOW/) CHOWIRA B M.

XX

XX Blatt L, Mcswiggen J, Chowira BM;

PI WPI; 2001-607195/69.

XX

XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense

PT constructs, which down regulate expression of a CD20 gene or neurite

PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and

PT central nervous system injury.

XX

PS Claim 30; Page 142; 200pp; English.

XX

XX The invention relates to a nucleic acid molecule which down regulates

XX expression of a CD20 gene and a nucleic acid molecule which down

XX regulates expression of a neurite growth inhibitor gene (NOGO). The

XX nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a

XX DNzyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule

XX possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr

XX an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA

XX with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA

XX of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.

XX Furthermore, it may be contacted with a cell to reduce CD20 activity of

XX the cell and treat a patient having a condition associated with the level

XX of CD20. The treatment may further comprise the use of one or more

XX therapies. In particular, the CD20-targeting nucleic acid may be used to

XX treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-

XX Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic

XX leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell

XX lymphoma (MCL), immunocyto (IMC), small B-cell lymphocytic lymphoma,

XX immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-

XX targeting nucleic acid is used to cleave RNA of the NOGO gene in the

XX presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the

XX nucleic acid may be contacted with a cell to reduce NOGO activity of

XX the cell and treat a patient having a condition associated with the level

XX of CD20. The treatment may further comprise the use of one or more

XX therapies. In particular, the CD20-targeting nucleic acid may be used to

XX treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-

XX Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic

XX leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell

XX lymphoma (MCL), immunocyto (IMC), small B-cell lymphocytic lymphoma,

XX immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-

XX targeting nucleic acid is used to cleave RNA of the NOGO gene in the

XX presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the

XX nucleic acid may be contacted with a cell to reduce NOGO activity of

XX the cell and treat a patient having a condition associated with the level

XX of CD20. The treatment may further comprise the use of one or more

XX therapies. In particular, the NOGO-targeting nucleic acid may be used to

XX treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-

XX Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic

XX leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell

XX lymphoma (MCL), immunocyto (IMC), small B-cell lymphocytic lymphoma,

XX immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-

XX targeting nucleic acid is used to cleave RNA of the NOGO gene in the

XX presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the

XX nucleic acid may be contacted with a cell to reduce NOGO activity of

XX the cell and treat a patient having a condition associated with the level

XX of CD20. The treatment may further comprise the use of one or more

XX therapies. In particular, the NOGO-targeting nucleic acid may be used to

XX treat central nervous system (CNS) injury and cerebrovascular accident

XX (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),

XX chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),

XX parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob

XX disease, muscular dystrophy, and/or other neurodegenerative disease

XX states which respond to the modulation of NOGO expression. The present

XX sequence is a hammerhead ribozyme of the invention

XX

SQ Sequence 17 BP; 1 A; 5 C; 2 G; 0 T; 9 U; 0 Other;

Query Match 16.2%; Score 11.8; DB 1; Length 17;

Best Local Similarity 33.3%; Pred. No. 6.3e+02;

Matches 5; Conservative 8; Mismatches 2; Indels 0; Gaps 0;

QY 915 TGGTCTTTCCTTT 929

Db 2 UGAUCUUUGCCUUCU 16

RESULT 177

ABV83094/c

ID ABV83094 standard; DNA; 17 BP.

XX

```
% ABV83094;
% 03-JAN-2003 (first entry)
% Human HTPL scanning oligonucleotide SEQ ID 4340.
% Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
% human testis expressed Patched like protein; testis; adrenal; liver;
% male germ cell development; bone marrow; brain; kidney; lung; placenta;
% prostate; skeletal muscle; colon; male infertility; cancer; ss.
% Homo sapiens.
% EP1229046-A2.
% 07-AUG-2002.
% 28-JAN-2002; 2002EP-00001167.
% 30-JAN-2001; 2001WO-US000663.
% 30-JAN-2001; 2001WO-US000664.
% 30-JAN-2001; 2001WO-US000665.
% 30-JAN-2001; 2001WO-US000667.
% 30-JAN-2001; 2001WO-US000668.
% 30-JAN-2001; 2001WO-US000669.
% 23-MAY-2001; 2001US-00864761.
% 09-OCT-2001; 2001US-0327898P.
% (AEOM-) AEOMICA INC.
% Zhan J;
% WPI; 2002-676582/73.
% Novel isolated human testis expressed Patched like protein (HTPL), useful
% for identifying agonist and antagonist and specific binding partners, and
% for treating subjects having defects in HTPL.
% Example 2; Page 632; 718pp; English.
% The present invention relates to human testis expressed Patched like
% protein (HTPL), see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL
% has two isoforms, with a few single base pair differences between the
% two. One of the single base pair changes introduces a premature stop
% codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
% shares an overall structure organisation with the Patched protein. The
% shared structural features strongly imply that HTPL plays a role similar
% to that of Patched, and is a potential tumour suppressor. HTPL is
% important in regulating male germ cell development, and the HTPL gene was
% mapped to human chromosome 10p12.1. HTPL and its coding sequence are
% useful for diagnosing a disorder caused by mutation in HTPL, and in
% therapy and manufacture of a medicament for treatment or prevention of
% such disorder associated with decreased expression or activity of human
% HTPL. Such disorders include disorders of testis, or adrenal, adult and
% foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
% skeletal muscle or colon function. HTPL proteins and nucleic acids are
% clinically useful diagnostic markers and potential therapeutic agents for
% male infertility and cancer. The present oligonucleotide was used in an
% example from the invention
% Sequence 17 BP; 9 A; 4 C; 2 G; 2 T; 0 U; 0 Other;
%
% Query Match 16.2%; Score 11.8; DB 1; Length 17;
% Best Local Similarity 86.7%; Pred. No. 6.3e+02;
% Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
%
% 915 TGGTCTTTGCTTTT 929
% |||||
% 17 TGGTCTTGACTGT 3
%
% RESULT 178
% 3260689
```

```
ID ABZ60689 standard; RNA; 17 BP.
XX AC
XX ABZ60689;
XX XX
XX 21-MAR-2003 (first entry)
XX XX
XX Human K-Ras DNazyme substrate #801.
XX DE
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosolic; anti-HIV;
XX anti-rheumatic; cancer; AIDS; ss.
XX OS
XX Homo sapiens.
XX PN
XX WO200297114-A2.
XX XX
XX 05-DEC-2002.
XX XX
XX 29-MAY-2002; 2002WO-US016840.
XX XX
XX 29-MAY-2001; 2001US-0294140P.
XX PR
XX 06-JUN-2001; 2001US-0296249P.
XX PR
XX 10-SEP-2001; 2001US-0318471P.
XX XX
XX (RIBO-) RIBOZYME PHARM INC.
XX PA
XX Mcswiggen J;
XX PI
XX WPI; 2003-140484/13.
XX DR
XX Novel short interfering RNA and enzymatic nucleic acid useful for
XX treating cancer, modulates the expression of a nucleic acid encoding
XX HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX PT
XX Claim 58; Page 100; 185pp; English.
XX PS
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
XX acid molecule or an enzymatic nucleic acid molecule, that modulates
XX expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
XX human immunodeficiency virus (HIV) or a component of HIV. The nucleic
XX acid molecule of the invention has cytosolic, anti-HIV, and anti-
XX rheumatic activity. The nucleic acid molecules are useful for reducing
XX HER2, K-Ras, and HIV activity in a cell. The nucleic acids are
XX also useful for treating breast, ovarian, colorectal, lung, prostate,
XX bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
XX shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
XX ABZ66530 - ABZ66595 represent substrate/target sequences for the human
XX ribozymes of the invention
XX SQ
XX Sequence 17 BP; 4 A; 3 C; 1 G; 0 T; 9 U; 0 Other;
%
% Query Match 16.2%; Score 11.8; DB 1; Length 17;
% Best Local Similarity 40.0%; Pred. No. 6.3e+02;
% Matches 6; Conservative 7; Mismatches 2; Indels 0; Gaps 0;
%
% QY 937 CTCCTCATGCTTTA 951
% | | | | | | | |
% Db 3 CACUUCUUGUUUUA 17
%
% RESULT 179
% AAA55643/C
% ID AAA55643 standard; DNA; 18 BP.
XX AC
XX AAA55643;
XX XX
XX 30-AUG-2000 (first entry)
XX DE
XX TRAF5 antisense oligonucleotide ISIS# 26943.
XX XX
XX Tumour necrosis factor receptor-associated factor; TRAF; human;
XX antisense oligonucleotide; phosphorothioate; antiproliferative;
XX anti-inflammatory; E-selectin; jun kinase; ss.
```

```

XX O3 Synthetic.
XX PF WO200020435-A1.
XX PN
XX PD 13-APR-2000.
XX PP 05-OCT-1999; 99WO-US023171.
XX PR 06-OCT-1998; 98US-00167109.
XX PA (ISIS-) ISIS PHARM INC.
XX PL Baker BF, Cowsert LM, Monia BP, Xu XS;
XX DR WPI; 2000-303732/26.
XX
XX Antisense oligonucleotides targeted to nucleic acids encoding human tumor
XX PT necrosis factor receptor-associated factor (TRAF), useful for treating
XX PT diseases associated with TRAF expression such as inflammatory diseases.
XX TX
XX PS Example 21; Page 65; 170pp; English.
XX
XX The present invention relates to antisense oligonucleotides (see AAA55496
XX CC -A55757) which are targeted to nucleic acids encoding a human tumour
XX CC necrosis factor receptor-associated factor (TRAF). The antisense
XX CC sequences comprise at least one modified internucleotide linkage, which
XX CC is a phosphorothioate linkage. The oligonucleotides also include at least
XX CC one modified sugar moiety such as a 2'-O-methoxyethyl sugar moiety.
XX CC Sequences AAA55490-A55495 represent nucleotide sequences encoding human
XX CC TRAF1-6. Included in the invention is a method for treating a human
XX CC having a disease associated with the expression of TRAF comprising
XX CC administering an antisense oligonucleotide. The reduction of Jun kinase
XX CC activation in cells comprises contacting the cells with an antisense
XX CC oligonucleotide targeted to TRAF-6. A method for the reduction of B-
XX CC selectin expression in cells or tissues comprises contacting the cells or
XX CC tissues with an antisense oligonucleotide targeted to TRAF-2 or TRAF-6.
XX CC The antisense oligonucleotides have antiproliferative and anti-
XX CC inflammatory activity and are useful for treating disorders associated
XX CC with cell proliferation and inflammation. The antisense oligonucleotides
XX CC may also be used as a diagnostic probe for studying gene function
XX
XX SQ Sequence 18 BP; 8 A; 3 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 16.2%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 6.5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 909 TTCTCTTGCTCTTG 923
DB 16 TTCTCTTGACTTG 2
|||||
|||||
|||||
RESULT 180
AAZ72264
ID AAZ72264 standard; DNA; 18 BP.
XX
XX AC AAZ72264;
XX
XX 10-SEP-2001 (first entry)
XX
XX Human biallelic marker upstream amplification primer SEQ ID NO:6620.
XX
XX Human genome; biallelic marker; high density disequilibrium map;
XX KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
XX KW haplotyping; hybridisation; identification; characterisation;
XX KW amplification; single nucleotide polymorphism; SNP; PCR primer;
XX KW diagnosis; ss.
XX
XX OS Homo sapiens.
XX
XX WO9954500-A2.
XX
XX

```

```

PD 28-OCT-1999.
XX
XX PF 21-APR-1999; 99WO-IB000822.
XX
XX PR 21-APR-1998; 98US-0082614P.
XX PR 23-NOV-1998; 98US-0109732P.
XX
XX PA (GEST ) GENSET.
XX
XX Cohen D, Blumenfeld M, Chumakov I;
XX PI WPI; 2000-013267/01.
XX
XX Novel biallelic markers used to construct a high density disequilibrium
XX PT map of the human genome.
XX
XX Claim 9; Page 1642; 2745pp; English.
XX
XX AAZ65654 to AAZ69578 represent human biallelic markers from the present
XX CC invention, which contain a polymorphic base at position 24 of their
XX CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
XX CC primers for the biallelic markers. The biallelic markers of the invention
XX CC have a variety of uses: they can be used for high density mapping of the
XX CC human genome, and in complex association studies and haplotyping studies
XX CC which are useful in determining the genetic basis for disease states.
XX CC Compositions and methods of the invention can also be useful for the
XX CC identification of the targets for the development of pharmaceutical
XX CC agents and diagnostic methods, as well as the characterisation of the
XX CC differential efficacious responses to and side effects from
XX CC pharmaceutical agents acting on a disease as well as other treatment.
XX CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
XX CC 3367, are not actually given a sequence in the Sequence Listing from the
XX CC present invention
XX
XX SQ Sequence 18 BP; 4 A; 2 C; 6 G; 6 T; 0 U; 0 Other;
Query Match 16.2%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 6.5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 903 GGTCATTTCTCTTG 917
DB 4 GGACATTTTCATTGG 18
|||||
|||||
|||||
RESULT 181
AAA92572
ID AAA92572 standard; DNA; 18 BP.
XX
XX AC AAA92572;
XX
XX 04-JAN-2001 (first entry)
XX
XX Antisense oligonucleotide ISIS# 30282.
XX
XX Human; SRA; steroid receptor RNA activator; cytostatic; antiinflammatory;
XX KW SRA inhibitor; cancer; infection; antisense oligonucleotide; ss.
XX
XX OS Synthetic.
XX
XX PN US6107092-A.
XX
XX 22-AUG-2000.
XX
XX 29-MAR-1999; 99US-00280409.
XX
XX 29-MAR-1999; 99US-00280409.
XX
XX (ISIS-) ISIS PHARM INC.
XX PA (BAYU ) BAYLOR COLLEGE MEDICINE.
XX
XX Cowsert LM, Bennett CF, O'malley BW;
XX

```

WPI; 2000-586211/55.

Antisense compounds targeted to steroid receptor RNA activator useful for diagnosis, prophylaxis and treatment of diseases associated with the steroid activator, such as infection, inflammation or tumor formation.

Claim 3; Col 41; 47pp; English.

The present sequence is one of a large number of antisense oligonucleotides which is directed against one of four human steroid receptor RNA activator (SRA) nucleic acid sequences. Two series of antisense oligonucleotides were synthesised. The first series comprised 8 -30 oligodeoxynucleotides with a phosphorothioate backbone. The second series comprised chimeric oligonucleotides composed of a central gap region, consisting of ten 2'-deoxynucleotides, which was flanked on both sides by four-nucleotide wings. The wings were composed of 2'-methoxyethyl (2'-MOE) nucleotides. Both series contained the same nucleotide sequences. The antisense compounds are useful for research, diagnosis, treatment and prophylaxis to prevent or delay infection, inflammation or tumour formation. Therapeutically the oligonucleotides are highly safe and are effectively administered to humans

Sequence 18 BP; 1 A; 5 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 16.2%; Score 11.8; DB 1; Length 18;  
 Best Local Similarity 86.7%; Pred. No. 6.5e+02;  
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

935 TCCTCTTCATGGTT 949  
 |||||  
 2 TTCTCTTCATGGCT 16

RESULT 182  
 ABZ10580  
 ID ABZ10580 standard; DNA; 18 BP.  
 AC ABZ10580;  
 XX 16-JAN-2003 (first entry)  
 XX Haematopoietic cell proliferation disorder related oligonucleotide #720.  
 DE Human; haematopoietic cell proliferation disorder; cytostatic;  
 KW gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia;  
 KW cytosine methylation state; probe; primer; ss.  
 XX Homo sapiens.  
 OS Synthetic.  
 XX WO200277272-A2.  
 XX 03-OCT-2002.  
 XX 26-MAR-2002; 2002WO-EP003401.  
 XX 26-MAR-2001; 2001US-0278333P.  
 XX (EPIG-) EPIGENOMICS AG.  
 PA Berlin K, Braun A, Distler J, Guetig D, Howe A, Mueller J;  
 PI Olek A, Piepenbrock C, Adorjan P, Grabs G, Lesche R, Leu E;  
 PI Lewin A, Lipscher E, Maier S, Model F, Mueller V, Otto T, Pelet C;  
 PI Schwöpe I, Ziebarth H;  
 XX WPI; 2003-018942/01.  
 DR Detecting and differentiating between hematopoietic cell proliferative  
 XX disorders, comprises contacting a target nucleic acid with a reagent that  
 PT distinguishes between methylated and non-methylated CpG dinucleotides.  
 PT Claim 15; Page 51; 117pp; English.

CC The present invention describes a method for detecting and  
 CC differentiating between haematopoietic cell proliferative disorders  
 CC associated with at least 1 gene and/or their regulatory regions in a  
 CC subject. The method comprises contacting a target nucleic acid in a  
 CC biological sample obtained from the subject with at least 1 reagent,  
 CC which distinguishes between methylated and non-methylated CpG  
 CC dinucleotides within the target nucleic acid. ABZ09861 to ABZ11118  
 CC represent specifically claimed nucleotide sequences from the present  
 CC invention. Oligonucleotides from the present invention can be used: for  
 CC differentiating between healthy haematopoietic cells and proliferative  
 CC disorder haematopoietic cells; for differentiating between acute  
 CC lymphocytic leukaemia and acute myelogenous leukaemia; as probes for  
 CC determining the cytosine methylation state and/or single nucleotide  
 CC polymorphisms (SNPs) of haematopoietic cell proliferation disorder  
 CC related sequences and their complements; and as primers for the  
 CC amplification of haematopoietic cell proliferation disorder related DNA  
 CC sequences. The nucleotide sequences from the present invention can also  
 CC be used for detecting a predisposition to, differentiation between  
 CC subclasses, diagnosis, prognosis, treatment and/or monitoring of  
 CC haematopoietic cell proliferative disorders. The present method enables a  
 CC highly specific classification of haematopoietic cell proliferative  
 CC disorders allowing for improved and informed treatment of patients  
 XX

SQ Sequence 18 BP; 5 A; 0 C; 3 G; 10 T; 0 U; 0 Other;

Query Match 16.2%; Score 11.8; DB 1; Length 18;  
 Best Local Similarity 86.7%; Pred. No. 6.5e+02;  
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 945 TCGTTTAATGATCG 959  
 |||||  
 DB 1 TTGTTTAATGATTG 15

RESULT 183  
 ABZ10579  
 ID ABZ10579 standard; DNA; 18 BP.  
 AC ABZ10579;  
 XX 16-JAN-2003 (first entry)  
 XX Haematopoietic cell proliferation disorder related oligonucleotide #719.  
 DE Human; haematopoietic cell proliferation disorder; cytostatic;  
 KW gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia;  
 KW cytosine methylation state; probe; primer; ss.  
 XX Homo sapiens.  
 OS Synthetic.  
 XX WO200277272-A2.  
 XX 03-OCT-2002.  
 XX 26-MAR-2002; 2002WO-EP003401.  
 XX 26-MAR-2001; 2001US-0278333P.  
 XX (EPIG-) EPIGENOMICS AG.  
 PA Berlin K, Braun A, Distler J, Guetig D, Howe A, Mueller J;  
 PI Olek A, Piepenbrock C, Adorjan P, Grabs G, Lesche R, Leu E;  
 PI Lewin A, Lipscher E, Maier S, Model F, Mueller V, Otto T, Pelet C;  
 PI Schwöpe I, Ziebarth H;  
 XX WPI; 2003-018942/01.  
 DR Detecting and differentiating between hematopoietic cell proliferative  
 XX disorders, comprises contacting a target nucleic acid with a reagent that  
 PT distinguishes between methylated and non-methylated CpG dinucleotides.  
 PT Claim 15; Page 51; 117pp; English.



XX The present invention describes a method for detecting and  
 CC differentiating between haematopoietic cell proliferative disorders  
 CC associated with at least 1 gene and/or their regulatory regions in a  
 CC subject. The method comprises contacting a target nucleic acid in a  
 CC biological sample obtained from the subject with at least 1 reagent,  
 CC which distinguishes between methylated and non-methylated CpG  
 CC dinucleotides within the target nucleic acid. ABZ09861 to ABZ11118  
 CC represent specifically claimed nucleotide sequences from the present  
 CC invention. Oligonucleotides from the present invention can be used: for  
 CC differentiating between healthy haematopoietic cells and proliferative  
 CC disorder haematopoietic cells; for differentiating between acute  
 CC lymphocytic leukaemia and acute myelogenous leukaemia; as probes for  
 CC determining the cytosine methylation state and/or single nucleotide  
 CC polymorphisms (SNPs) of haematopoietic cell proliferation disorder  
 CC related sequences and their complements; and as primers for the  
 CC amplification of haematopoietic cell proliferation disorder related DNA  
 CC sequences. The nucleotide sequences from the present invention can also  
 CC be used for detecting a predisposition to, differentiation between  
 CC subclasses, diagnosis, prognosis, treatment and/or monitoring of  
 CC haematopoietic cell proliferative disorders. The present method enables a  
 CC highly specific classification of haematopoietic cell proliferative  
 CC disorders allowing for improved and informed treatment of patients  
 XX

SQ Sequence 18 BP; 5 A; 2 C; 3 G; 8 T; 0 U; 0 Other;  
 Query Match 16.2%; Score 11.8; DB 1; Length 18;  
 Best Local Similarity 86.7%; Pred. No. 6.5e+02;  
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

CY 945 TGGTTTAAATGATATCG 959  
 | | | | | | | | | |  
 Db 1 TTGTTTAAATGATATCG 15

RESULT 184  
 ADC70095  
 ID ADC70095 standard; DNA; 18 BP.  
 AC ADC70095;  
 XX  
 XX 18-DEC-2003 (first entry)  
 XX  
 XX Primer oligo used for analysing CpG islands in genomic DNA (SeqID 585).  
 XX PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide;  
 KW adenocarcinoma; squamous cell carcinoma; cytosine methylation state;  
 KW cytosine methylation state.  
 XX  
 XX Unidentified.  
 XX WO2003052135-A2.  
 XX  
 XX 26-JUN-2003.  
 XX 10-DEC-2002; 2002WO-EP014026.  
 XX 14-DEC-2001; 2001DE-01061625.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Burger M, Field JK, Genc B, Liloglou T, Lipscher E, Maier S;  
 PI Nimmrich I;  
 XX WPI; 2003-533029/50.  
 XX  
 XX Detecting and differentiating cytosine methylation state of genomic DNA,  
 PT useful for diagnosing, treating prognosticating and/or monitoring lung  
 PT cell proliferative disorders e.g. adenocarcinoma and squamous cell  
 PT carcinoma.  
 XX  
 XX Claim 15; SEQ ID NO 585; 58pp; English.

CC This invention relates to a novel method for detecting and  
 CC differentiating between lung cell proliferative disorders associated with  
 CC at least one gene and/or their regulatory regions. Specifically, it  
 CC refers to a method comprising contacting a target nucleic acid in a  
 CC biological sample with at least one reagent, wherein the reagent is able  
 CC to distinguish between methylated and non-methylated CpG dinucleotides  
 CC present in the target DNA. As such, it is possible to further  
 CC differentiate and diagnose medical conditions including adenocarcinoma  
 CC and squamous cell carcinoma, and their respective adjacent lung tissue.  
 CC The present invention describes cytosine methylation state of genomic DNA,  
 CC that are useful as probes for determining the cytosine methylation state  
 CC or single nucleotide polymorphisms (SNPs) of the target sequence. This  
 CC oligonucleotide sequence is a primer oligomer used for the analysis of  
 CC CpG positions within genomic DNA, used in an exemplification of the  
 CC invention.  
 XX

SQ Sequence 18 BP; 5 A; 0 C; 3 G; 10 T; 0 U; 0 Other;  
 Query Match 16.2%; Score 11.8; DB 1; Length 18;  
 Best Local Similarity 86.7%; Pred. No. 6.5e+02;  
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

CY 945 TGGTTTAAATGATATCG 959  
 | | | | | | | | | |  
 Db 1 TTGTTTAAATGATATCG 15

RESULT 185  
 ADC70094  
 ID ADC70094 standard; DNA; 18 BP.  
 AC ADC70094;  
 XX  
 XX 18-DEC-2003 (first entry)  
 XX  
 XX Primer oligo used for analysing CpG islands in genomic DNA (SeqID 584).  
 XX PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide;  
 KW adenocarcinoma; squamous cell carcinoma; cytosine methylation state;  
 KW cytosine methylation state.  
 XX  
 XX Unidentified.  
 XX WO2003052135-A2.  
 XX  
 XX 26-JUN-2003.  
 XX 10-DEC-2002; 2002WO-EP014026.  
 XX 14-DEC-2001; 2001DE-01061625.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Burger M, Field JK, Genc B, Liloglou T, Lipscher E, Maier S;  
 PI Nimmrich I;  
 XX WPI; 2003-533029/50.  
 XX  
 XX Detecting and differentiating cytosine methylation state of genomic DNA,  
 PT useful for diagnosing, treating prognosticating and/or monitoring lung  
 PT cell proliferative disorders e.g. adenocarcinoma and squamous cell  
 PT carcinoma.  
 XX  
 XX Claim 15; SEQ ID NO 584; 58pp; English.

CC This invention relates to a novel method for detecting and  
 CC differentiating between lung cell proliferative disorders associated with  
 CC at least one gene and/or their regulatory regions. Specifically, it  
 CC refers to a method comprising contacting a target nucleic acid in a  
 CC biological sample with at least one reagent, wherein the reagent is able  
 CC to distinguish between methylated and non-methylated CpG dinucleotides  
 CC present in the target DNA. As such, it is possible to further  
 CC differentiate and diagnose medical conditions including adenocarcinoma  
 CC and squamous cell carcinoma, and their respective adjacent lung tissue.  
 CC The present invention describes cytosine methylation state of genomic DNA,  
 CC that are useful as probes for determining the cytosine methylation state  
 CC or single nucleotide polymorphisms (SNPs) of the target sequence. This  
 CC oligonucleotide sequence is a primer oligomer used for the analysis of  
 CC CpG positions within genomic DNA, used in an exemplification of the  
 CC invention.  
 XX

and squamous cell carcinoma, and their respective adjacent lung tissue.  
The present invention describes cytosolic oligomers and PNA-oligomers that are useful as probes for determining the cytosine methylation state or single nucleotide polymorphisms (SNPs) of the target sequence. This oligonucleotide sequence is a primer oligomer used for the analysis of CpG positions within genomic DNA, used in an exemplification of the invention.

Sequence 18 BP; 5 A; 2 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 16.2%; Score 11.8; DB 1; Length 18;

Best Local Similarity 86.7%; Pred. No. 6.5e+02;

Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

945 TGGTTTAATGATCG 959

1 TGGTTTAACGATCG 15

RESULT 186

DE84422

ADE84422 standard; DNA; 18 BP.

ADE84422;

29-JAN-2004 (first entry)

Human lymphoid cell proliferative disorder gene CpG analysis oligo #128.

lymphoid cell proliferative disorder; methylation;

methyated CpG dinucleotide; single nucleotide polymorphism; SNP;

diffuse large B-cell lymphoma; mantle cell lymphoma;

chronic lymphocytic leukemia; small lymphocytic lymphoma;

follicular lymphoma; diagnosis; prognosis; primer; ss.

Homo sapiens.

WO2003044226-A2.

30-MAY-2003.

25-NOV-2002; 2002WO-EP013265.

23-NOV-2001; 2001DE-01057491.

28-DEC-2001; 2001DE-01064501.

(EPIG-) EPIGENOMICS AG.

Burger M, Caldwell C, Genc B, Becker E, Maier S, Nimmrich I;

WPI; 2003-457621/43.

Detecting and differentiating between lymphoid cell proliferative disorders comprises contacting a target nucleic acid with at least one reagent that distinguishes between methylated and non-methylated CpG dinucleotides.

Claim 30; SEQ ID NO 418; 448pp; English.

The invention relates to a method of detecting and differentiating between lymphoid cell proliferative disorders associated with at least one gene and/or their regulatory regions in a subject by contacting a target nucleic acid in a biological sample obtained from the subject with at least one reagent or series of reagents that distinguish between methylated and non-methylated CpG dinucleotides within the target nucleic acid. The genes and/or their regulatory regions are preferably selected from MDR1, CSNK2B, EGR4, AR, CDK4, RB2, CDC25A, GP1b beta, MYOD1, CDH3, MYC11, ELK1, ABL1, APC, BCL2, CDH1, CDKN1A, CDKN2a, CDKN2B, FOS, GSTP1, HIC-1, MGMT, MLH1, MOS, MYC, PTEN, RBL2, TGFBR2, TP73, CDKNIC, GSK3beta, ESRI, APAF1, BAK1, BAX or HOXA5. Oligomers, peptide nucleic acid (PNA)-oligomers and/or isolated nucleic acids based on the sequences of the genes are useful for detecting the methylation state of all the CpG dinucleotides within one or more the sequences, or their complements,

for determining the cytosine methylation state and or single nucleotide polymorphisms (SNPs), and for differentiating at least two of the medical conditions such as diffuse large B-cell lymphoma, mantle cell lymphoma, chronic lymphocytic leukemia, small lymphocytic lymphoma and follicular lymphoma. They are also useful for detecting of a predisposition to, differentiation between subclasses, diagnosis, prognosis, treating and/or monitoring of lymphoid cell proliferative disorder. This sequence represents an oligonucleotide used to analyse of CpG positions within the above mentioned genes.

Sequence 18 BP; 5 A; 0 C; 3 G; 10 T; 0 U; 0 Other;

Query Match 16.2%; Score 11.8; DB 1; Length 18;

Best Local Similarity 86.7%; Pred. No. 6.5e+02;

Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

945 TGGTTTAATGATCG 959

1 TGGTTTAATGATCG 15

RESULT 187

ADE84421

ID ADE84421 standard; DNA; 18 BP.

AC ADE84421;

29-JAN-2004 (first entry)

Human lymphoid cell proliferative disorder gene CpG analysis oligo #127.

lymphoid cell proliferative disorder; methylation;

methyated CpG dinucleotide; single nucleotide polymorphism; SNP;

diffuse large B-cell lymphoma; mantle cell lymphoma;

chronic lymphocytic leukemia; small lymphocytic lymphoma;

follicular lymphoma; diagnosis; prognosis; primer; ss.

Homo sapiens.

WO2003044226-A2.

30-MAY-2003.

25-NOV-2002; 2002WO-EP013265.

23-NOV-2001; 2001DE-01057491.

28-DEC-2001; 2001DE-01064501.

(EPIG-) EPIGENOMICS AG.

Burger M, Caldwell C, Genc B, Becker E, Maier S, Nimmrich I;

WPI; 2003-457621/43.

Detecting and differentiating between lymphoid cell proliferative disorders comprises contacting a target nucleic acid with at least one reagent that distinguishes between methylated and non-methylated CpG dinucleotides.

Claim 30; SEQ ID NO 417; 448pp; English.

The invention relates to a method of detecting and differentiating between lymphoid cell proliferative disorders associated with at least one gene and/or their regulatory regions in a subject by contacting a target nucleic acid in a biological sample obtained from the subject with at least one reagent or series of reagents that distinguish between methylated and non-methylated CpG dinucleotides within the target nucleic acid. The genes and/or their regulatory regions are preferably selected from MDR1, CSNK2B, EGR4, AR, CDK4, RB2, CDC25A, GP1b beta, MYOD1, CDH3, MYC11, ELK1, ABL1, APC, BCL2, CDH1, CDKN1A, CDKN2a, CDKN2B, FOS, GSTP1, HIC-1, MGMT, MLH1, MOS, MYC, PTEN, RBL2, TGFBR2, TP73, CDKNIC, GSK3beta, ESRI, APAF1, BAK1, BAX or HOXA5. Oligomers, peptide nucleic acid (PNA)-oligomers and/or isolated nucleic acids based on the sequences

CC of the genes are useful for detecting the methylation state of all the  
 CC CpG dinucleotides within one or more the sequences, or their complements,  
 CC for determining the cytosine methylation state and/or single nucleotide  
 CC polymorphisms (SNPs), and for differentiating at least two of the medical  
 CC conditions such as diffuse large B-cell lymphoma, mantle cell lymphoma,  
 CC chronic lymphocytic leukemia, small lymphocytic lymphoma and follicular  
 CC lymphoma. They are also useful for detecting of a predisposition to,  
 CC differentiation between subclasses, diagnosis, prognosis, treating and/or  
 CC monitoring of lymphoid cell proliferative disorder. This sequence  
 CC represents an oligonucleotide used to analyse of CpG positions within the  
 CC above mentioned genes.  
 XX  
 SQ Sequence 18 BP; 5 A; 2 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 16.2%; Score 11.8; DB 1; Length 18;  
 Best Local Similarity 86.7%; Pred. No. 6.5e+02;  
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

CY 945 TGGTTTAAATGATCG 959  
 DB 1 TTGTTTACGTATCG 15

RESULT 188  
 AAQ40484/C  
 ID AAQ40484 standard; DNA; 17 BP.

XX AAQ40484;

XX 29-JUL-1993 (first entry)

DE PCR primer for the proctase B gene.

XX Precursor; cloning; trypsin; amplification; ss.

OS Synthetic.

EN JP05068570-A.

XX 23-MAR-1993.

XX 12-SEP-1991; 91JP-00260569.

XX 12-SEP-1991; 91JP-00260569.

XX (MEIJ ) MEIJI SEIKA KAISHA.

XX WPI; 1993-130642/16.

XX Proctase B gene for commercial use - encodes specified aminoacid  
 PT sequence.

XX Disclosure; Page 7; 10pp; Japanese.

CC Trypsin digest fragments of purified proctase B were used to design PCR  
 CC primers for cloning of the proctase B gene. A cDNA library was prepd.  
 CC from Aspergillus niger and a DNA primer synthesised. A specific DNA probe  
 CC was amplified from the template library by PCR and the proctase B gene  
 CC cloned into E. coli HB101 for expression of the proctase B precursor. See  
 CC also AAQ40483-9  
 XX

SQ Sequence 17 BP; 8 A; 1 C; 4 G; 0 T; 0 U; 4 Other;

Query Match 15.9%; Score 11.6; DB 1; Length 17;  
 Best Local Similarity 68.8%; Pred. No. 6.8e+02;  
 Matches 11; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

CY 935 TCCCTCTTCATGCTTT 950  
 DB 17 TCCCTCTCTCTTTT 2

RESULT 189

ACC64682  
 ID ACC64682 standard; DNA; 17 BP.  
 XX  
 AC ACC64682;  
 XX  
 DT 01-JUL-2003 (first entry)  
 XX  
 DE Murine oligonucleotide associated with tumour supression, SEQ ID 1929.  
 XX  
 KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;  
 KW tumour suppression; tumour reversion; apoptosis; virus resistance;  
 KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;  
 KW schizophrenia; ss.  
 XX  
 OS Mus musculus.  
 XX  
 XX WO2003025176-A2.  
 XX  
 PD 27-MAR-2003.  
 XX  
 PF 17-SEP-2002; 2002WO-IB004210.  
 XX  
 PR 17-SEP-2001; 2001FR-00011979.  
 XX  
 XX (MOLE-) MOLECULAR ENGINES LAB.  
 XX  
 XX Telerman A, Amson R, Tuijnder M;  
 XX  
 DR WPI; 2003-333167/31.  
 XX  
 XX New isolated nucleic acid, useful for treating viral diseases associated  
 PT with tumors and cell degeneration, also related polypeptides, antibodies  
 PT and transfected cells.  
 XX  
 PS Disclosure; Page 256; 738pp; French.  
 XX  
 CC The present invention relates to murine oligonucleotides (ACC62754-  
 CC ACC68806), which are associated with tumour suppression, tumour  
 CC reversion, apoptosis and virus resistance. The oligonucleotides are  
 CC useful as (1) as probes and primers for detecting, identifying,  
 CC quantifying and/or amplifying nucleic acid, e.g. as one component of a  
 CC gene chip; in vitro as (anti)sense reagents; and (2) for production of  
 CC recombinant polypeptides. The oligonucleotides are useful for preparation  
 CC of pharmaceuticals for prevention and/or treatment of viral diseases that  
 CC are characterised by development of tumours or cell degeneration,  
 CC specifically cancer but also Alzheimer's disease and schizophrenia  
 XX  
 SQ Sequence 17 BP; 1 A; 4 C; 2 G; 9 T; 0 U; 1 Other;  
 Query Match 15.9%; Score 11.6; DB 1; Length 17;  
 Best Local Similarity 91.7%; Pred. No. 6.8e+02;  
 Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
 CY 918 TCTTTGCTTTT 929  
 DB 6 TCTWTGCTTTT 17  
 RESULT 190  
 ABC25843/C  
 ID ABC25843 standard; DNA; 13 BP.  
 XX  
 AC ABC25843;  
 XX  
 XX 20-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide SEQ ID NO 25860 for detecting SNP TSC0006595.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.

```
1 WO200177384-A2.
2
3 18-OCT-2001.
4
5 06-APR-2001; 2001WO-IB000713.
6
7 07-APR-2000; 2000DE-01019173.
8 (EPIG-) EPIGENOMICS AG.
9 Olek A, Piepenbrock C, Berlin K;
10 WPI; 2001-657177/75.
11
12 Set of oligonucleotides, useful for diagnosis and cell typing, is
13 designed to detect single-nucleotide polymorphisms and cytosine
14 methylation status.
15
16 Claim 1; SEQ ID NO 25860; 29pp + Sequence Listing; German.
17
18 This invention describes novel oligonucleotide primers or peptide nucleic
19 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
20 and cytosine methylation status in chemically pretreated genomic DNA. The
21 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
22 range of diseases including immune system, gastrointestinal, respiratory,
23 central nervous system, cardiovascular and metabolic disorders. The
24 oligomers are also used for detecting cell type differentiation. ABC00010
25 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
26 represent the oligomers described in the invention. NOTE: The sequence
27 data for this patent did not form part of the printed specification, but
28 was obtained in electronic format from WIPO at
29 ftp.wipo.int/pub/published_pct_sequences
30
31 Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
32
33 This invention describes novel oligonucleotide primers or peptide nucleic
34 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
35 and cytosine methylation status in chemically pretreated genomic DNA. The
36 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
37 range of diseases including immune system, gastrointestinal, respiratory,
38 central nervous system, cardiovascular and metabolic disorders. The
39 oligomers are also used for detecting cell type differentiation. ABC00010
40 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
41 represent the oligomers described in the invention. NOTE: The sequence
42 data for this patent did not form part of the printed specification, but
43 was obtained in electronic format from WIPO at
44 ftp.wipo.int/pub/published_pct_sequences
45
46 Query Match 15.6%; Score 11.4; DB 1; Length 13;
47 Best Local Similarity 92.3%; Pred. No. 6.2e+02;
48 Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
49
50 940 TTTCATTGGTTTAA 952
51 ||| ||||| |||||
52 13 TTTCATTGGTTTAA 1
53
54 RESULT 191
55 ABC35597/c
56 ABC35597 standard; DNA; 13 BP.
57 ABC35597;
58 20-FEB-2002 (first entry)
59
60 Oligonucleotide SEQ ID NO 35614 for detecting SNP TSC0011256.
61
62 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
63 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
64 central nervous system; gastrointestinal; respiratory; immune; metabolic.
65
66 Homo sapiens.
67
68 WO200177384-A2.
69 18-OCT-2001.
70
71 06-APR-2001; 2001WO-IB000713.
72
73 07-APR-2000; 2000DE-01019173.
74 (EPIG-) EPIGENOMICS AG.
75 Olek A, Piepenbrock C, Berlin K;
```

```
DR WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 35614; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 15.6%; Score 11.4; DB 1; Length 13;
XX Best Local Similarity 92.3%; Pred. No. 6.2e+02;
XX Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 944 TTTCATTGGTTTAA 956
Db ||| ||||| |||||
13 TTTCATTGGTTTAA 1
RESULT 192
ABF33003
ID ABF33003 standard; DNA; 13 BP.
XX
AC ABF33003;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 133000 for detecting SNP TSC0033182.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 133000; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
```

central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 2 A; 6 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 15.6%; Score 11.4; DB 1; Length 13;  
Best Local Similarity 92.3%; Pred. No. 6.2e+02;  
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 931 TCCCTCCTCTCA 943  
DB 1 TCCCTCCTCTCA 13

RESULT 193  
ABC54454  
ID ABC54454 standard; DNA; 13 BP.  
XX AC ABC54454;  
XX AC  
XX 21-FEB-2002 (first entry)  
XX  
XX Oligonucleotide SEQ ID NO 54471 for detecting SNP TSC0014932.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX  
XX Claim 1; SEQ ID NO 54471; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 15.6%; Score 11.4; DB 1; Length 13;  
Best Local Similarity 92.3%; Pred. No. 6.2e+02;  
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 941 TCATTGCTTTAA 952  
DB 1 TAATTGCTTTAA 13

RESULT 194  
ABC25842  
ID ABC25842 standard; DNA; 13 BP.  
XX AC ABC25842;  
XX AC  
XX 20-FEB-2002 (first entry)  
XX  
XX Oligonucleotide SEQ ID NO 25859 for detecting SNP TSC0006595.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX  
XX Claim 1; SEQ ID NO 25859; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 15.6%; Score 11.4; DB 1; Length 13;  
Best Local Similarity 92.3%; Pred. No. 6.2e+02;  
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 940 TTCATTGCTTTAA 952  
DB 1 TTATTGCTTTAA 13

RESULT 195  
ABC40096/C  
ID ABC40096 standard; DNA; 13 BP.  
XX AC ABC40096;  
XX AC  
XX 21-FEB-2002 (first entry)  
XX  
XX

```
1 Oligonucleotide SEQ ID NO 40113 for detecting SNP TSC0012202.
2
3 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
4 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
5 central nervous system; gastrointestinal; respiratory; immune; metabolic.
6
7 Homo sapiens.
8
9 WO200177384-A2.
10
11 18-OCT-2001.
12
13 06-APR-2001; 2001WO-IB000713.
14
15 07-APR-2000; 2000DE-01019173.
16
17 (EPIG-) EPIGENOMICS AG.
18
19 Olek A, Piepenbrock C, Berlin K;
20
21 WPI; 2001-657177/75.
22
23 Set of oligonucleotides, useful for diagnosis and cell typing, is
24 designed to detect single-nucleotide polymorphisms and cytosine
25 methylation status.
26
27 Claim 1; SEQ ID NO 40113; 29pp + Sequence Listing; German.
28
29 This invention describes novel oligonucleotide primers or peptide nucleic
30 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
31 and cytosine methylation status in chemically pretreated genomic DNA. The
32 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
33 range of diseases including immune system, gastrointestinal, respiratory,
34 central nervous system, cardiovascular and metabolic disorders. The
35 oligomers are also used for detecting cell type differentiation. ABC00010
36 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
37 represent the oligomers described in the invention. NOTE: The sequence
38 data for this patent did not form part of the printed specification, but
39 was obtained in electronic format from WIPO at
40 ftp.wipo.int/pub/published_pct_sequences
41
42 Sequence 13 BP; 8 A; 0 C; 4 G; 1 T; 0 U; 0 Other;
43
44 Query Match 15.6%; Score 11.4; DB 1; Length 13;
45 Best Local Similarity 92.3%; Pred. No. 6.2e+02;
46 Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
47
48 918 TCTTTGCCCTTTA 930
49 ||||| |||||
50 13 TCTTTCCCTTTA 1
51
52 RESULT 196
53 IC40097
54 ABC40097 standard; DNA; 13 BP.
55
56 ABC40097;
57
58 21-FEB-2002 (first entry)
59
60 Oligonucleotide SEQ ID NO 40114 for detecting SNP TSC0012202.
61
62 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
63 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
64 central nervous system; gastrointestinal; respiratory; immune; metabolic.
65
66 Homo sapiens.
67
68 WO200177384-A2.
69
70 18-OCT-2001.
71
72 Oligonucleotide SEQ ID NO 40113 for detecting SNP TSC0004139.
73
74 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
75 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
76 central nervous system; gastrointestinal; respiratory; immune; metabolic.
77
78 Homo sapiens.
79
80 WO200177384-A2.
81
82 18-OCT-2001.
83
84 06-APR-2001; 2001WO-IB000713.
85
86 07-APR-2000; 2000DE-01019173.
87
88 (EPIG-) EPIGENOMICS AG.
89
90 Olek A, Piepenbrock C, Berlin K;
91
92 WPI; 2001-657177/75.
93
94 Set of oligonucleotides, useful for diagnosis and cell typing, is
95 designed to detect single-nucleotide polymorphisms and cytosine
96 methylation status.
```

```
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI WPI; 2001-657177/75.
XX
DR Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
PS Claim 1; SEQ ID NO 40114; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 1 A; 4 C; 0 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 15.6%; Score 11.4; DB 1; Length 13;
XX Best Local Similarity 92.3%; Pred. No. 6.2e+02;
XX Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 918 TCTTTGCCCTTTA 930
Db 1 TCTTTCCCTTTA 13
XX
RESULT 197
ABC20177
ID ABC20177 standard; DNA; 13 BP.
XX
AC ABC20177;
XX
XX 20-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 20194 for detecting SNP TSC0004139.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
```

XX Claim 1; SEQ ID NO 20194; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 3 A; 2 C; 1 G; 7 T; 0 U; 0 Other;  
Query Match 15.6%; Score 11.4; DB 1; Length 13;  
Best Local Similarity 92.3%; Pred. No. 6.2e+02;  
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 941 TCATTGGTTTAAT 953  
Db 1 TCATTGGTTTAAT 13  
  
RESULT 198  
ABF31356/c  
ID ABF31356 standard; DNA; 13 BP.  
XX  
XX  
XX ABF31356;  
XX  
XX 21-FEB-2002 (first entry)  
XX  
XX Oligonucleotide SEQ ID NO 131353 for detecting SNP TSC0032783.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX  
XX Claim 1; SEQ ID NO 131353; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 3 A; 2 C; 1 G; 7 T; 0 U; 0 Other;  
Query Match 15.6%; Score 11.4; DB 1; Length 13;  
Best Local Similarity 92.3%; Pred. No. 6.2e+02;  
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 941 TCATTGGTTTAAT 953  
Db 1 TCATTGGTTTAAT 13  
  
RESULT 199  
ABF33002/c  
ID ABF33002 standard; DNA; 13 BP.  
XX  
XX  
XX ABF33002;  
XX  
XX 21-FEB-2002 (first entry)  
XX  
XX Oligonucleotide SEQ ID NO 132999 for detecting SNP TSC0033182.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX  
XX Claim 1; SEQ ID NO 132999; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 5 A; 0 C; 6 G; 2 T; 0 U; 0 Other;  
Query Match 15.6%; Score 11.4; DB 1; Length 13;  
Best Local Similarity 92.3%; Pred. No. 6.2e+02;  
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 931 TCCTCTCCTTCA 943  
Db 13 TCCTCTCCTTCA 1  

CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 6 A; 0 C; 6 G; 1 T; 0 U; 0 Other;  
Query Match 15.6%; Score 11.4; DB 1; Length 13;  
Best Local Similarity 92.3%; Pred. No. 6.2e+02;  
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 931 TCCTCTCCTTCA 943  
Db 13 TCCTCTCCTTCA 1  
  
RESULT 199  
ABF33002/c  
ID ABF33002 standard; DNA; 13 BP.  
XX  
XX  
XX ABF33002;  
XX  
XX 21-FEB-2002 (first entry)  
XX  
XX Oligonucleotide SEQ ID NO 132999 for detecting SNP TSC0033182.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX  
XX Claim 1; SEQ ID NO 132999; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 5 A; 0 C; 6 G; 2 T; 0 U; 0 Other;  
Query Match 15.6%; Score 11.4; DB 1; Length 13;  
Best Local Similarity 92.3%; Pred. No. 6.2e+02;  
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 931 TCCTCTCCTTCA 943  
Db 13 TCCTCTCCTTCA 1  





XX  
PI Olek A, Piepenbrock C, Berlin K;  
DR WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
XX Claim 1; SEQ ID NO 20193; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 7 A; 1 C; 2 G; 3 T; 0 U; 0 Other;  
Query Match 15.6%; Score 11.4; DB 1; Length 13;  
Best Local Similarity 92.3%; Pred. No. 6.2e+02;  
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
OY 941 TCATTGGTTTAAT 953  
Db 13 TCATTGGTTTAAT 1  
RESULT 203  
ABC54455/C  
ID ABC54455 standard; DNA; 13 BP.  
XX  
AC ABC54455;  
XX  
XX 21-FEB-2002 (first entry)  
XX  
XX Oligonucleotide SEQ ID NO 54472 for detecting SNP TSC0014932.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
XX Claim 1; SEQ ID NO 54472; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;  
Query Match 15.6%; Score 11.4; DB 1; Length 13;  
Best Local Similarity 92.3%; Pred. No. 6.2e+02;  
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
OY 941 TCATTGGTTTAAT 953  
Db 13 TCATTGGTTTAAT 1  
RESULT 204  
AAT37613  
ID AAT37613 standard; mRNA; 15 BP.  
XX  
AC AAT37613;  
XX  
XX 11-NOV-1996 (first entry)  
XX  
XX Apo(a) mRNA (nt. pos. 12974) hammerhead ribozyme target sequence.  
XX  
XX Enzymatic RNA molecule; cleavage; apolipoprotein (a); apo(a);  
KW hammerhead ribozyme; target sequence; diagnosis; treatment;  
KW lipoprotein (a); atherosclerosis; myocardial infarction; stroke;  
KW restenosis; heart disease; human; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO9609392-A1.  
XX  
XX 28-MAR-1996.  
XX  
XX 21-SEP-1995; 95WO-US011995.  
XX  
XX 23-SEP-1994; 94US-00311760.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Stinchcomb DT, Mcswiggen J, Newton RS, Ramharack R;  
XX WPI; 1996-188454/19.  
XX  
XX Enzymatic RNA mols. which cleave apo(a) mRNA - useful in diagnosis and  
PT treatment of conditions related to Lp(a) levels, e.g. atherosclerosis,  
PT myocardial infarction, and heart diseases.  
XX  
XX Claim 2; Page 18; 37pp; English.  
XX  
XX A claimed enzymatic RNA mol. for the cleavage of apolipoprotein (a)  
CC (apo(a)) mRNA, specifically a hammerhead ribozyme, has binding arms  
CC complementary to the present sequence (nucleotide position 12974). The  
CC ribozyme blocks to some extent apo(a) expression, and can therefore be  
CC used to diagnose or treat conditions related to lipoprotein (a) levels,  
CC e.g. atherosclerosis, myocardial infarction, stroke, restenosis and heart  
CC disease. PCR was used to generate a substrate for T7 RNA polymerase  
CC transcription from human apo(a) cDNA clones. Labelled transcripts were  
CC synthesised in vitro to form 2 templates. The oligonucleotides and  
CC labelled transcripts were annealed, RNaseH added and the mixts.  
CC incubated. After a designated time the reactions were stopped, and RNA  
CC sepd. on sequencing polyacrylamide gels. The percentage of substrate  
CC cleaved was determined by autoradiographic quantification, and the most  
CC accessible ribozyme target sites chosen

```

1  Sequence 15 BP; 2 A; 5 C; 1 G; 0 T; 7 U; 0 Other;
2
3  Query Match      15.6%; Score 11.4; DB 1; Length 15;
4  Best Local Similarity 46.2%; Pred. No. 6.8e+02;
5  Matches 6; Conservative 6; Mismatches 1; Indels 0; Gaps 0;
6
7  933 CCTCTCTTTCATT 945
8  1 :||:|:|:|:|:|
9  2 CAUCCUUCUUAU 14
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000
1001
1002
1003
1004
1005
1006
1007
1008
1009
1010
1011
1012
1013
1014
1015
1016
1017
1018
1019
1020
1021
1022
1023
1024
1025
1026
1027
1028
1029
1030
1031
1032
1033
1034
1035
1036
1037
1038
1039
1040
1041
1042
1043
1044
1045
1046
1047
1048
1049
1050
1051
1052
1053
1054
1055
1056
1057
1058
1059
1060
1061
1062
1063
1064
1065
1066
1067
1068
1069
1070
1071
1072
1073
1074
1075
1076
1077
1078
1079
1080
1081
1082
1083
1084
1085
1086
1087
1088
1089
1090
1091
1092
1093
1094
1095
1096
1097
1098
1099
1100
1101
1102
1103
1104
1105
1106
1107
1108
1109
1110
1111
1112
1113
1114
1115
1116
1117
1118
1119
1120
1121
1122
1123
1124
1125
1126
1127
1128
1129
1130
1131
1132
1133
1134
1135
1136
1137
1138
1139
1140
1141
1142
1143
1144
1145
1146
1147
1148
1149
1150
1151
1152
1153
1154
1155
1156
1157
1158
1159
1160
1161
1162
1163
1164
1165
1166
1167
1168
1169
1170
1171
1172
1173
1174
1175
1176
1177
1178
1179
1180
1181
1182
1183
1184
1185
1186
1187
1188
1189
1190
1191
1192
1193
1194
1195
1196
1197
1198
1199
1200
1201
1202
1203
1204
1205
1206
1207
1208
1209
1210
1211
1212
1213
1214
1215
1216
1217
1218
1219
1220
1221
1222
1223
1224
1225
1226
1227
1228
1229
1230
1231
1232
1233
1234
1235
1236
1237
1238
1239
1240
1241
1242
1243
1244
1245
1246
1247
1248
1249
1250
1251
1252
1253
1254
1255
1256
1257
1258
1259
1260
1261
1262
1263
1264
1265
1266
1267
1268
1269
1270
1271
1272
1273
1274
1275
1276
1277
1278
1279
1280
1281
1282
1283
1284
1285
1286
1287
1288
1289
1290
1291
1292
1293
1294
1295
1296
1297
1298
1299
1300
1301
1302
1303
1304
1305
1306
1307
1308
1309
1310
1311
1312
1313
1314
1315
1316
1317
1318
1319
1320
1321
1322
1323
1324
1325
1326
1327
1328
1329
1330
1331
1332
1333
1334
1335
1336
1337
1338
1339
1340
1341
1342
1343
1344
1345
1346
1347
1348
1349
1350
1351
1352
1353
1354
1355
1356
1357
1358
1359
1360
1361
1362
1363
1364
1365
1366
1367
1368
1369
1370
1371
1372
1373
1374
1375
1376
1377
1378
1379
1380
1381
1382
1383
1384
1385
1386
1387
1388
1389
1390
1391
1392
1393
1394
1395
1396
1397
1398
1399
1400
1401
1402
1403
1404
1405
1406
1407
1408
1409
1410
1411
1412
1413
1414
1415
1416
1417
1418
1419
1420
1421
1422
1423
1424
1425
1426
1427
1428
1429
1430
1431
1432
1433
1434
1435
1436
1437
1438
1439
1440
1441
1442
1443
1444
1445
1446
1447
1448
1449
1450
1451
1452
1453
1454
1455
1456
1457
1458
1459
1460
1461
1462
1463
1464
1465
1466
1467
1468
1469
1470
1471
1472
1473
1474
1475
1476
1477
1478
1479
1480
1481
1482
1483
1484
1485
1486
1487
1488
1489
1490
1491
1492
1493
1494
1495
1496
1497
1498
1499
1500
1501
1502
1503
1504
1505
1506
1507
1508
1509
1510
1511
1512
1513
1514
1515
1516
1517
1518
1519
1520
1521
1522
1523
1524
1525
1526
1527
1528
1529
1530
1531
1532
1533
1534
1535
1536
1537
1538
1539
1540
1541
1542
1543
1544
1545
1546
1547
1548
1549
1550
1551
1552
1553
1554
1555
1556
1557
1558
1559
1560
1561
1562
1563
1564
1565
1566
1567
1568
1569
1570
1571
1572
1573
1574
1575
1576
1577
1578
1579
1580
1581
1582
1583
1584
1585
1586
1587
1588
1589
1590
1591
1592
1593
1594
1595
1596
1597
1598
1599
1600
1601
1602
1603
1604
1605
1606
1607
1608
1609
1610
1611
1612
1613
1614
1615
1616
1617
1618
1619
1620
1621
1622
1623
1624
1625
1626
1627
1628
1629
1630
1631
1632
1633
1634
1635
1636
1637
1638
1639
1640
1641
1642
1643
1644
1645
1646
1647
1648
1649
1650
1651
1652
1653
1654
1655
1656
1657
1658
1659
1660
1661
1662
1663
1664
1665
1666
1667
1668
1669
1670
1671
1672
1673
1674
1675
1676
1677
1678
1679
1680
1681
1682
1683
1684
1685
1686
1687
1688
1689
1690
1691
1692
1693
1694
1695
1696
1697
1698
1699
1700
1701
1702
1703
1704
1705
1706
1707
1708
1709
1710
1711
1712
1713
1714
1715
1716
1717
1718
1719
1720
1721
1722
1723
1724
1725
1726
1727
1728
1729
1730
1731
1732
1733
1734
1735
1736
1737
1738
1739
1740
1741
1742
1743
1744
1745
1746
1747
1748
1749
1750
1751
1752
1753
1754
1755
1756
1757
1758
1759
1760
1761
1762
1763
1764
1765
1766
1767
1768
1769
1770
1771
1772
1773
1774
1775
1776
1777
1778
1779
1780
1781
1782
1783
1784
1785
1786
1787
1788
1789
1790
1791
1792
1793
1794
1795
1796
1797
1798
1799
1800
1801
1802
1803
1804
1805
1806
1807
1808
1809
1810
1811
1812
1813
1814
1815
1816
1817
1818
1819
1820
1821
1822
1823
1824
1825
1826
1827
1828
1829
1830
1831
1832
1833
1834
1835
1836
1837
1838
1839
1840
1841
1842
1843
1844
1845
1846
1847
1848
1849
1850
1851
1852
1853
1854
1855
1856
1857
1858
1859
1860
1861
1862
1863
1864
1865
1866
1867
1868
1869
1870
1871
1872
1873
1874
1875
1876
1877
1878
1879
1880
1881
1882
1883
1884
1885
1886
1887
1888
1889
1890
1891
1892
1893
1894
1895
1896
1897
1898
1899
1900
1901
1902
1903
1904
1905
1906
1907
1908
1909
1910
1911
1912
1913
1914
1915
1916
1917
1918
1919
1920
1921
1922
1923
1924
1925
1926
1927
1928
1929
1930
1931
1932
1933
1934
1935
1936
1937
1938
1939
1940
1941
1942
1943
1944
1945
1946
1947
1948
1949
1950
1951
1952
1953
1954
1955
1956
1957
1958
1959
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971
1972
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
2031
2032
2033
2034
2035
2036
2037
2038
2039
2040
2041
2042
2043
2044
2045
2046
2047
2048
2049
2050
2051
2052
2053
2054
2055
2056
2057
2058
2059
2060
2061
2062
2063
2064
2065
2066
2067
2068
2069
2070
2071
2072
2073
2074
2075
2076
2077
2078
2079
2080
2081
2082
2083
2084
2085
2086
2087
2088
2089
2090
2091
2092
2093
2094
2095
2096
2097
2098
2099
2100
2101
2102
2103
2104
2105
2106
2107
2108
2109
2110
2111
2112
2113
2114
2115
2116
2117
2118
2119
2120
2121
2122
2123
2124
2125
2126
2127
2128
2129
2130
2131
2132
2133
2134
2135
2136
2137
2138
2139
2140
2141
2142
2143
2144
2145
2146
2147
2148
2149
2150
2151
2152
2153
2154
2155
2156
2157
2158
2159
2160
2161
2162
2163
2164
2165
2166
2167
2168
2169
2170
2171
2172
2173
2174
2175
2176
2177
2178
2179
2180
2181
2182
2183
2184
2185
2186
2187
2188
2189
2190
2191
2192
2193
2194
2195
2196
2197
2198
2199
2200
2201
2202
2203
2204
2205
2206
2207
2208
2209
2210
2211
2212
2213
2214
2215
2216
2217
2218
2219
2220
2221
2222
2223
2224
2225
2226
2227
2228
2229
2230
2231
2232
2233
2234
2235
2236
2237
2238
2239
2240
2241
2242
2243
2244
2245
2246
2247
2248
2249
2250
2251
2252
2253
2254
2255
2256
2257
2258
2259
2260
2261
2262
2263
2264
2265
2266
2267
2268
2269
2270
2271
2272
2273
2274
2275
2276
2277
2278
2279
2280
2281
2282
2283
2284
2285
2286
2287
2288
2289
2290
2291
2292
2293
2294
2295
2296
2297
2298
2299
2300
2301
2302
2303
2304
2305
2306
2307
2308
2309
2310
2311
2312
2313
2314
2315
2316
2317
2318
2319
2320
2321
2322
2323
2324
2325
2326
2327
2328
2329
2330
2331
2332
2333
2334
2335
2336
2337
2338
2339
2340
2341
2342
2343
2344
2345
2346
2347
2348
2349
2350
2351
2352
2353
2354
2355
2356
2357
2358
2359
2360
2361
2362
2363
2364
2365
2366
2367
2368
2369
2370
2371
2372
2373
2374
2375
2376
2377
2378
2379
2380
2381
2382
2383
2384
2385
2386
2387
2388
2389
2390
2391
2392
2393
2394
2395
2396
2397
2398
2399
2400
2401
2402
2403
2404
2405
2406
2407
2408
2409
2410
2411
2412
2413
2414
2415
2416
2417
2418
2419
2420
2421
2422
2423
2424
2425
2426
2427
2428
2429
2430
2431
2432
2433
2434
2435
2436
2437
2438
2439
2440
2441
2442
2443
2444
2445
2446
2447
2448
2449
2450
2451
2452
2453
2454
2455
2456
2457
2458
2459
2460
2461
2462
2463
2464
2465
2466
2467
2468
2469
2470
2471
2472
2473
2474
2475
2476
2477
2478
2479
2480
2481
2482
2483
2484
2485
2486
2487
2488
2489
2490
2491
2492
2493
2494
2495
2496
2497
2498
2499
2500
2501
2502
2503
2504
2505
2506
2507
2508
2509
2510
2511
2512
2513
2514
2515
2516
2517
2518
2519
2520
2521
2522
2523
2524
2525
2526
2527
2528
2529
2530
2531
2532
2533
2534
2535
2536
2537
2538
2539
2540
2541
2542
2543
2544
2545
2546
2547
2548
2549
2550
2551
2552
2553
2554
2555
2556
2557
2558
2559
2560
2561
2562
2563
2564
2565
2566
2567
2568
2569
2570
2571
2572
2573
2574
2575
2576
2577
2578
2579
2580
2581
2582
2583
2584
2585
2586
2587
2588
2589
2590
2591
2592
2593
2594
2595
2596
2597
2598
2599
2600
2601
2602
2603
2604
2605
2606
2607
2608
2609
2610
2611
2612
2613
2614
2615
2616
2617
2618
2619
2620
2621
2622
2623
2624
2625
2626
2627
2628
2629
2630
2631
2632
2633
2634
2635
2636
2637
2638
```

```

XX Rolling template; nucleic acid synthesis; polynucleotide polymerase;
XX gene production; primer; ss.
XX Synthetic.
XX WO9914370-A1.
XX 25-MAR-1999.
XX 15-SEP-1998; 98WO-US019157.
XX 15-SEP-1997; 97US-00929856.
XX (HIAT/) HIAT A C.
XX (ROSE/) ROSE F D.
XX Hiatt AC, Rose FD;
XX WPI; 1999-244045/20.
XX Producing specific polynucleotides using rolling templates.
XX Example 5; Page 38; 109pp; English.
XX The invention relates to a method for producing polynucleotides having a
XX defined sequence using rolling templates that successively add
XX nucleotides (nts) to a longer primer strand. The method comprises: (i)
XX incubating, under annealing conditions, a primer and a template that has
XX a 5'-region not complementary to the primer, a 3'-region complementary to
XX the 3'-end of primer and a non-reactive 3'-terminus, with the template
XX being shorter than the primer; (ii) reacting the primer with at least one
XX nt in presence of a template-dependent polynucleotide polymerase to
XX extend it by at least one nt (complementary to the 5'-region of template)
XX at its 3'-end; (iii) separating the template and the extended primer; and
XX (iv) repeating the cycle of (i)-(iii) as often as needed to synthesize
XX the desired polynucleotide. The method is especially used to produce
XX genes or their segments. The method provides fast, accurate, inexpensive
XX synthesis of RNA or DNA and is more efficient than chemical coupling
XX processes. It has higher specificity and eliminates the need for
XX deprotection. The products can be cloned directly. The method avoids
XX problems of waste disposal and includes an inherent editing effect
XX (failure sequences will not be extended further in subsequent rounds) so
XX that purification of the end product is facilitated. Synthesis may take
XX place on a vector, simplifying cloning and sequences with codon usage
XX optimized for a particular host can be prepared
XX
XX Sequence 15 BP; 5 A; 2 C; 6 G; 2 T; 0 U; 0 Other;
XX Query Match 15.6%; Score 11.4; DB 1; Length 15;
XX Best Local Similarity 92.3%; Pred. No. 6.8e+02;
XX Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 931 TCCCTCCTCTTCA 943
DB 15 TGCCTCCTCTTCA 3
XX
RESULT 208
AAF26829
ID AAA26829 standard; DNA; 15 BP.
XX
XX AAA26829;
XX
XX 29-JUN-2000 (first entry)
XX Trichosporon aquatile polynucleotide sequence SEQ ID NO:96.
XX Trichosporon genus microbe; detection; species-specific; diagnosis;
XX trichosporosis; ds.
XX Trichosporon aquatile.
XX

```

```

PN JP2000060564-A.
XX
XX 29-FEB-2000.
XX
XX 24-AUG-1998; 98JP-00237060.
XX
XX 24-AUG-1998; 98JP-00237060.
XX
XX (IATR ) IATRON LAB INC.
XX
XX WPI; 2000-249679/22.
XX
XX Species-specific detection of a Trichosporon genus microbe species and a
XX new polynucleotide - used for the diagnosis and the treatment of
XX Trichosporosis.
XX
XX Disclosure; Page 44; 47pp; Japanese.
XX
XX The present invention describes a method for the species-specific
XX detection of a Trichosporon genus microbe which includes detecting a
XX polynucleotide specific to the species of a Trichosporon genus microbe.
XX Trichosporon polynucleotides can be used for the diagnosis and treatment
XX of Trichosporosis. The method can distinguish Trichosporosis species to
XX species level rapidly in high precision. AAA26734 to AAA26849 represent
XX polynucleotide sequences from various Trichosporon species, which are
XX used in the exemplification of the present invention
XX
XX Sequence 15 BP; 5 A; 2 C; 2 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 15.6%; Score 11.4; DB 1; Length 15;
XX Best Local Similarity 92.3%; Pred. No. 6.8e+02;
XX Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 940 TTCATTGCTTAA 952
DB 1 TTCATTGCTTAA 13
XX
RESULT 209
AAF49433
ID AAF49433 standard; DNA; 15 BP.
XX
XX AAF49433;
XX
XX 30-MAR-2001 (first entry)
XX
XX IGF-I oligonucleotide #393.
XX
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
XX hyperneovascular condition; hyperplasia; kidney disease;
XX neovascular condition of the retina; ss.
XX
XX Homo sapiens.
XX
XX WO200078341-A1.
XX
XX 28-DEC-2000.
XX
XX 21-JUN-2000; 2000WO-AU000693.
XX
XX 21-JUN-1999; 99US-0140345P.
XX
XX (MURD-) MURDOCH CHILDRENS RES INST.
XX
XX Wraight CU, Werther GA, Edmondson SR;
XX WPI; 2001-041421/05.
XX

```

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 8; Page 63; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 2 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 15.6%; Score 11.4; DB 1; Length 15;

Best Local Similarity 92.3%; Pred. No. 6.8e+02;

Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

900 CCTGTCATTTTC 912

|||||

1 CCTGGTCATCTTC 13

RESULT 210

AF49430

AAF49430 standard; DNA; 15 BP.

AAF49430;

30-MAR-2001 (first entry)

IGF-I oligonucleotide #390.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

XX

PS

XX

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

Example 8; Page 63; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 1 A; 6 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 15.6%; Score 11.4; DB 1; Length 15;

Best Local Similarity 92.3%; Pred. No. 6.8e+02;

Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

899 CCTGGTCATTTT 911

|||||

3 CCTGGTCATCTT 15

RESULT 211

AAF70053/C

ID AAF70053 standard; DNA; 15 BP.

AAF70053;

18-APR-2001 (first entry)

Human TNFRSF11B gene ASO probe, SEQ ID NO: 109.

Human; TNFRSF11B; osteoclastogenesis inhibitory factor; single nucleotide polymorphism; SNP; osteoclast recruitment; osteoclast function; osteoporosis; metastatic bone disease; Paget's disease; rheumatoid arthritis; periodontal bone disease; ASO; allele-specific oligonucleotide; probe; ss.

Homo sapiens.

WO200104137-A1.

18-JAN-2001.

10-JUL-2000; 2000WO-US018803.

09-JUL-1999; 99US-0143020P.

(GENA-) GENAISSANCE PHARM INC.

Chew A, Denton RR, Duda A, Nandabalan K, Stephens JC;

WPI; 2001-147175/15.

Human Osteoclastogenesis Inhibitory Factor nucleotides, comprising single nucleotide polymorphisms, useful for studying e.g. osteoporosis, Paget's disease and rheumatoid arthritis.

Claim 15; Page 23; 114pp; English.

The present sequence is a probe used to detect polymorphisms in the human osteoclastogenesis inhibitory factor (TNFRSF11B). Polynucleotides comprising one or more of twenty four novel single nucleotide polymorphisms in the TNFRSF11B gene have been identified. TNFRSF11B regulate osteoclast recruitment and function. An understanding of

CC variations in the gene should thus be useful in developing new therapies  
 CC for metabolic disorders caused by abnormal osteoclast recruitment and  
 CC function such as osteoporosis, metastatic bone disease, Paget's disease,  
 CC rheumatoid arthritis and periodontal bone disease

XX Sequence 15 BP; 7 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 15.6%; Score 11.4; DB 1; Length 15;  
 Best Local Similarity 92.3%; Pred. No. 6.8e+02;  
 Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 906 CATTTCCTTTGGT 918  
 ||||| |||||  
 CC 15 CATTACTTTGGT 3

RESULT 212  
 AAF69384/c  
 ID AAF69384 standard; DNA; 15 BP.

XX AAF69384;

18-APR-2001 (first entry)

Human IL4Ralpha gene probe #24.

XX Polymorphism; human; interleukin 4 receptor-alpha; IL4R-alpha;  
 KW allergic disease; probe; ss.

XX Homo sapiens.

XX WO200104270-A1.

XX 18-JAN-2001.

XX 13-JUL-2000; 2000WO-US019094.

XX 13-JUL-1999; 99US-0143435P.

XX (GENA-) GENAISSANCE PHARM INC.

XX Chew A, Denton RR, Duda A, Nandabalan K, Stephens JC;

PI Windemuth AK;

XX WPI; 2001-103078/11.

XX New isolated polynucleotide useful for the identification of therapeutics  
 XX in allergic diseases is new.

XX Claim 15; Page 42; 189pp; English.

XX The present invention relates to polymorphisms of the human interleukin 4  
 CC receptor-alpha gene (IL4R-alpha; see AAF57718 for the reference  
 CC sequence). Polynucleotides comprising polymorphic gene variants are  
 CC useful for therapeutic purposes. For example, where a patient may benefit  
 CC from expression of a particular IL4Ralpha protein isoform, an expression  
 CC vector encoding the isoform may be administered to the patient. It may  
 CC desirable to decrease or block expression of a particular IL4Ralpha  
 CC isogene, which may be done by turning off by transfection a targeted  
 CC organ, tissue or cell population with an expression vector that expresses  
 CC high levels of untranslatable mRNA for the isogene. Specific therapeutics  
 CC identified by these methods may be useful for allergic diseases. The  
 CC present sequence is a probe for human IL4R-alpha

XX Sequence 15 BP; 5 A; 3 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 15.6%; Score 11.4; DB 1; Length 15;  
 Best Local Similarity 92.3%; Pred. No. 6.8e+02;  
 Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 900 CCGGTCATTTTC 912  
 ||||| |||||  
 DB 15 CCGGTCATTTTC 3

RESULT 213  
 ABL57627/c  
 ID ABL57627 standard; DNA; 15 BP.

XX ABL57627;

XX 08-OCT-2002 (first entry)

XX Human SCYA24 ASO primer #12.

XX SCYA24; human; small inducible cytokine; isogene; antiasthmatic; asthma;  
 KW gene therapy; respiratory inflammatory disease; polymorphism; primer; ss.

XX Homo sapiens.

XX WO2002020851-A1.

XX 14-MAR-2002.

XX 10-SEP-2001; 2001WO-US028328.

XX 08-SEP-2000; 2000US-0231129P.

XX (GENA-) GENAISSANCE PHARM INC.

XX Anastasio AE, Han J, Kazemi A;

XX WPI; 2002-351785/38.

XX New genetic variants of small inducible cytokine subfamily A member 24  
 PT gene, useful in studying expression and function of the protein, and for  
 PT screening drugs to treat diseases such as asthma.

XX Claim 16; Page 14; 98pp; English.

XX The invention relates to a novel isolated polynucleotide comprising a  
 CC small inducible cytokine subfamily A (cys-cys), member 24 (SCYA24)  
 CC isogene. The polypeptide of the invention has antiasthmatic activity. The  
 CC polynucleotide may have a use in gene therapy. The polynucleotide and  
 CC polypeptide are useful in the development of drugs for treating  
 CC diseases associated with SCYA24 activity, e.g. respiratory inflammatory  
 CC diseases such as asthma. Allele-specific oligonucleotide (ASO) primers  
 CC used for detecting polymorphisms in the SCYA24 gene are represented in  
 CC ABL57616-ABL57645

XX Sequence 15 BP; 8 A; 0 C; 6 G; 0 T; 0 U; 1 Other;

Query Match 15.6%; Score 11.4; DB 1; Length 15;  
 Best Local Similarity 80.0%; Pred. No. 6.8e+02;  
 Matches 12; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 927 TTTATCCCTCCTCTT 941

DB 15 TTTCTCTCCTCTT 1

RESULT 214

AAA18974

ID AAA18974 standard; RNA; 17 BP.

XX AAA18974;

XX 19-JUN-2000 (first entry)

XX Human TIE-2 substrate sequence SEQ ID NO:2200.

XX Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;  
 KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;  
 KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;  
 KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;  
 KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;

1 age related macular degeneration; inflammation; neovascular glaucoma;  
 2 myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;  
 3 tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome;  
 4 Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.  
 5 Homo sapiens.  
 6 WO9950403-A2.  
 7 07-OCT-1999.  
 8 24-MAR-1999; 99WO-US006507.  
 9 27-MAR-1998; 98US-0079678P.  
 10 (RIBO-) RIBOZYME PHARM INC.  
 11 Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;  
 12 WPI; 1999-591315/50.  
 13 Novel ribozymes for modulating the synthesis, expression and/or stability  
 14 of an mRNA encoding an angiogenic factors.  
 15 Claim 56; Page 128; 305pp; English.

The present invention describes enzymatic cleave RNA molecules with RNA  
 1 cleaving activity, which specifically cleave RNA encoded by an aryl  
 2 hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3  
 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to  
 4 AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,  
 5 and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their  
 6 corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to  
 7 AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086  
 8 and AAA19155 to AAA19222 represent their corresponding target sequences;  
 9 AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme  
 10 sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and  
 11 AAA21596 to AAA21688 represent their corresponding target sequences;  
 12 AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequences  
 13 for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to  
 14 AAA23422 represent their corresponding target sequences. The ribozymes of  
 15 the invention are used for modulating the synthesis, expression and/or  
 16 stability of an mRNA encoding angiogenic factor, especially ARNT,  
 17 integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are  
 18 especially used to treat cancer, diabetic retinopathy, age related  
 19 macular degeneration (ARMD), inflammation, and arthritis, as well as  
 20 neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,  
 21 angiofibroma of tuberosus sclerosis, pot-wine stains, Sturge Weber  
 22 syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,  
 23 and other syndromes and diseases related to the levels of ARNT, Tie-2,  
 24 integrin subunit alpha-6, or integrin subunit beta-3

Sequence 17 BP; 2 A; 7 C; 0 G; 0 T; 8 U; 0 Other;  
 Query Match 15.6%; Score 11.4; DB 1; Length 17;  
 Best Local Similarity 46.2%; Pred. No. 7.3e+02;  
 Matches 6; Conservative 6; Mismatches 1; Indels 0; Gaps 0;

924 CTTTATCCCTC 936

|||||  
 5 CAUUUAUCCUC 17

SULT 215  
 A20484

AAA20484 standard; RNA; 17 BP.

AAA20484;

19-JUN-2000 (first entry)

Integrin alpha 6 subunit substrate sequence SEQ ID NO:3710.

KW Human; aryl hydrocarbon nuclear transport; ARNT; Tie-2; angiogenesis;  
 KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;  
 KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;  
 KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;  
 KW dermatologic; RNA cleavage; cancer; diabetic retinopathy; arthritis;  
 KW age related macular degeneration; inflammation; neovascular glaucoma;  
 KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;  
 KW tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome;  
 KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.  
 XX Homo sapiens.  
 OS WO9950403-A2.  
 PN 07-OCT-1999.  
 PD 24-MAR-1999; 99WO-US006507.  
 PF 27-MAR-1998; 98US-0079678P.  
 PR (RIBO-) RIBOZYME PHARM INC.  
 PA Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;  
 PI WPI; 1999-591315/50.  
 DR Novel ribozymes for modulating the synthesis, expression and/or stability  
 XX of an mRNA encoding an angiogenic factors.  
 PT Claim 55; Page 148; 305pp; English.

The present invention describes enzymatic cleave RNA molecules with RNA  
 1 cleaving activity, which specifically cleave RNA encoded by an aryl  
 2 hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3  
 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to  
 4 AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,  
 5 and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their  
 6 corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to  
 7 AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086  
 8 and AAA19155 to AAA19222 represent their corresponding target sequences;  
 9 AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme  
 10 sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and  
 11 AAA21596 to AAA21688 represent their corresponding target sequences;  
 12 AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequences  
 13 for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to  
 14 AAA23422 represent their corresponding target sequences. The ribozymes of  
 15 the invention are used for modulating the synthesis, expression and/or  
 16 stability of an mRNA encoding angiogenic factor, especially ARNT,  
 17 integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are  
 18 especially used to treat cancer, diabetic retinopathy, age related  
 19 macular degeneration (ARMD), inflammation, and arthritis, as well as  
 20 neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,  
 21 angiofibroma of tuberosus sclerosis, pot-wine stains, Sturge Weber  
 22 syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,  
 23 and other syndromes and diseases related to the levels of ARNT, Tie-2,  
 24 integrin subunit alpha-6, or integrin subunit beta-3

Sequence 17 BP; 2 A; 3 C; 3 G; 0 T; 9 U; 0 Other;

Query Match 15.6%; Score 11.4; DB 1; Length 17;  
 Best Local Similarity 30.8%; Pred. No. 7.3e+02;  
 Matches 4; Conservative 8; Mismatches 1; Indels 0; Gaps 0;

QY 908 TTTTCTTTGGTCT 920

Db :|||:|  
 2 DUUUUUUUGGACU 14

RESULT 216  
 AAA18976

ID AAA18976 standard; RNA; 17 BP.

XX AAA18976;

```
XX 19-JUN-2000 (first entry)
XX Human TIE-2 substrate sequence SEQ ID NO:2202.
XX
XX Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
XX integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
XX hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;
XX ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
XX age related macular degeneration; cancer; diabetic retinopathy; arthritis;
XX dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
XX myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
XX tuberos scleriosis; pot-wine stain; Sturge Weber syndrome;
XX Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
XX Homo sapiens.
XX WO9950403-A2.
XX 07-OCT-1999.
XX
XX 24-MAR-1999; 99WO-US006507.
XX 27-MAR-1998; 98US-0079678P.
XX (RIBO-) RIBOZYME PHARM INC.
XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX MPI; 1999-591315/50.
XX
XX Novel ribozymes for modulating the synthesis, expression and/or stability
XX of an mRNA encoding an angiogenic factors.
XX
XX Claim 56; Page 128; 305pp; English.
XX
XX The present invention describes enzymatic nucleic acid molecules with RNA
XX cleaving activity, which specifically cleave RNA encoded by an aryl
XX hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
XX gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
XX AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
XX and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
XX corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
XX AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
XX and AAA19155 to AAA19222 represent their corresponding target sequences;
XX AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
XX sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
XX AAA21596 to AAA21688 represent their corresponding target sequences;
XX AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
XX for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
XX AAA23422 represent their corresponding target sequences. The ribozymes of
XX the invention are used for modulating the synthesis, expression and/or
XX stability of an mRNA encoding angiogenic factor, especially ARNT,
XX integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
XX especially used to treat cancer, diabetic retinopathy, age related
XX macular degeneration (ARMD), inflammation, and arthritis, as well as
XX neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
XX angiofibroma of tuberos scleriosis, pot-wine stains, Sturge Weber
XX syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
XX and other syndromes and diseases related to the levels of ARNT, Tie-2,
XX integrin subunit alpha-6, or integrin subunit beta-3
XX
XX Sequence 17 BP; 3 A; 7 C; 0 G; 0 T; 7 U; 0 Other;
XX
XX Query Match 15.6%; Score 11.4; DB 1; Length 17;
XX Best Local Similarity 46.2%; Pred. No. 7.3e+02;
XX Matches 6; Conservative 6; Mismatches 1; Indels 0; Gaps 0;
XX
XX 924 CCTTTATCCCTC 936
XX | : : : : | : : : : |
XX 3 CAUUUUUACCCUC 15
```

```
RESULT 217
AAA20482
ID AAA20482 standard; RNA; 17 BP.
XX
XX AAA20482;
XX
XX 19-JUN-2000 (first entry)
XX
XX Integrin alpha 6 subunit substrate sequence SEQ ID NO:3708.
XX
XX Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
XX integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
XX hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;
XX ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
XX dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
XX age related macular degeneration; inflammation; neovascular glaucoma;
XX myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
XX tuberos scleriosis; pot-wine stain; Sturge Weber syndrome;
XX Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
XX Homo sapiens.
XX WO9950403-A2.
XX 07-OCT-1999.
XX
XX 24-MAR-1999; 99WO-US006507.
XX 27-MAR-1998; 98US-0079678P.
XX (RIBO-) RIBOZYME PHARM INC.
XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX MPI; 1999-591315/50.
XX
XX Novel ribozymes for modulating the synthesis, expression and/or stability
XX of an mRNA encoding an angiogenic factors.
XX
XX Claim 55; Page 148; 305pp; English.
XX
XX The present invention describes enzymatic nucleic acid molecules with RNA
XX cleaving activity, which specifically cleave RNA encoded by an aryl
XX hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
XX gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
XX AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
XX and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
XX corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
XX AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
XX and AAA19155 to AAA19222 represent their corresponding target sequences;
XX AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
XX sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
XX AAA21596 to AAA21688 represent their corresponding target sequences;
XX AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
XX for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
XX AAA23422 represent their corresponding target sequences. The ribozymes of
XX the invention are used for modulating the synthesis, expression and/or
XX stability of an mRNA encoding angiogenic factor, especially ARNT,
XX integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
XX especially used to treat cancer, diabetic retinopathy, age related
XX macular degeneration (ARMD), inflammation, and arthritis, as well as
XX neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
XX angiofibroma of tuberos scleriosis, pot-wine stains, Sturge Weber
XX syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
XX and other syndromes and diseases related to the levels of ARNT, Tie-2,
XX integrin subunit alpha-6, or integrin subunit beta-3
XX
XX Sequence 17 BP; 2 A; 2 C; 4 G; 0 T; 9 U; 0 Other;
XX
XX Query Match 15.6%; Score 11.4; DB 1; Length 17;
XX Best Local Similarity 30.8%; Pred. No. 7.3e+02;
XX Matches 4; Conservative 8; Mismatches 1; Indels 0; Gaps 0;
```

```
908 TTTTCTTTGGTCT 920
      ::::|::|::|:
      5 UUUUUUUGGACU 17

RESULT 218
AAA18975
AAA18975 standard; RNA; 17 BP.
AAA18975;
19-JUN-2000 (first entry)
Human TIE-2 substrate sequence SEQ ID NO:2201.
Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;
ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
age related macular degeneration; inflammation; neovascular glaucoma;
myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
Homo sapiens.
WO9950403-A2.
07-OCT-1999.
24-MAR-1999; 99WO-US006507.
27-MAR-1998; 98US-0079678P.
(RIBO-) RIBOZYME PHARM INC.
Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
WPI; 1999-591315/50.

Novel ribozymes for modulating the synthesis, expression and/or stability
of an mRNA encoding an angiogenic factors.
Claim 56; Page 128; 305pp; English.

The present invention describes enzymatic nucleic acid molecules with RNA
cleaving activity, which specifically cleave RNA encoded by an aryl
hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
and AAA19155 to AAA19222 represent their corresponding target sequences;
AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
AAA21596 to AAA21688 represent their corresponding target sequences;
AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
AAA23422 represent their corresponding target sequences. The ribozymes of
the invention are used for modulating the synthesis, expression and/or
stability of an mRNA encoding angiogenic factor, especially ARNT,
integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
especially used to treat cancer, diabetic retinopathy, age related
macular degeneration (ARMD), inflammation, and arthritis, as well as
neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
and other syndromes and diseases related to the levels of ARNT, Tie-2,
integrin subunit alpha-6, or integrin subunit beta-3

Sequence 17 BP; 3 A; 6 C; 0 G; 0 T; 8 U; 0 Other;
```

```
Query Match 15.6%; Score 11.4; DB 1; Length 17;
Best Local Similarity 46.2%; Pred. No. 7.3e+02;
Matches 6; Conservative 6; Mismatches 1; Indels 0; Gaps 0;

QY 924 CCTTTTATCCCTC 936
      |:::|::|::|:
      4 CAUUUAUCCUC 16

RESULT 219
AAA20483
ID AAA20483 standard; RNA; 17 BP.
XX
AC AAA20483;
XX
19-JUN-2000 (first entry)
DE Integrin alpha 6 subunit substrate sequence SEQ ID NO:3709.
XX
Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;
ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
age related macular degeneration; inflammation; neovascular glaucoma;
myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
Homo sapiens.
WO9950403-A2.
07-OCT-1999.
24-MAR-1999; 99WO-US006507.
27-MAR-1998; 98US-0079678P.
(RIBO-) RIBOZYME PHARM INC.
Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
WPI; 1999-591315/50.

Novel ribozymes for modulating the synthesis, expression and/or stability
of an mRNA encoding an angiogenic factors.
Claim 55; Page 148; 305pp; English.

The present invention describes enzymatic nucleic acid molecules with RNA
cleaving activity, which specifically cleave RNA encoded by an aryl
hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
and AAA19155 to AAA19222 represent their corresponding target sequences;
AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
AAA21596 to AAA21688 represent their corresponding target sequences;
AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
AAA23422 represent their corresponding target sequences. The ribozymes of
the invention are used for modulating the synthesis, expression and/or
stability of an mRNA encoding angiogenic factor, especially ARNT,
integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
especially used to treat cancer, diabetic retinopathy, age related
macular degeneration (ARMD), inflammation, and arthritis, as well as
neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
```



CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,  
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,  
CC integrin subunit alpha-6, or integrin subunit beta-3  
XX  
SQ Sequence 17 BP; 2 A; 3 C; 3 G; 0 T; 9 U; 0 Other;  
Query Match 15.6%; Score 11.4; DB 1; Length 17;  
Best Local Similarity 30.8%; Pred. No. 7.3e+02;  
Matches 4; Conservative 8; Mismatches 1; Indels 0; Gaps 0;  
QY 908 TTTTCTTGGCT 920  
Db ::::|:::| |:  
3 UUUUCUUUGACU 15  
RESULT 220  
ABK02835  
ID ABK02835 standard; RNA; 17 BP.  
XX  
AC ABK02835;  
XX  
DT 12-MAR-2002 (first entry)  
XX  
DE Human CD20 Hammerhead ribozyme #134.  
XX  
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;  
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
KW DNazyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;  
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
KW inflammatory arthropathy; central nervous system injury;  
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
KW Parkinson's disease; ataxia; Huntington's disease;  
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
WF WO200159103-A2.  
XX  
PD 16-AUG-2001.  
XX  
PF 09-FEB-2001; 2001WO-US004273.  
XX  
PR 11-FEB-2000; 2000US-0181797P.  
PR 28-FEB-2000; 2000US-0185516P.  
PR 06-MAR-2000; 2000US-0187128P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J.  
PA (CHOW/) CHOWRIRA B.M.  
XX  
PI Blatt L, Mcswiggen J, Chowrira BM;  
XX  
LR WPI; 2001-607195/69.  
XX  
FT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
FT constructs, which down regulate expression of a CD20 gene or neurite  
FT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
FT central nervous system injury.  
XX  
FS Claim 30; Page 142; 200pp; English.  
XX  
CC The invention relates to a nucleic acid molecule which down regulates  
CC expression of a CD20 gene and a nucleic acid molecule which down  
CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
CC DNazyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule  
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NVN motif) pr

CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA  
CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
CC the cell and treat a patient having a condition associated with the level  
CC of CD20. The treatment may further comprise the use of one or more  
CC therapies. In particular, the CD20 targeting nucleic acid may be used to  
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
CC cell and treat a patient having a condition associated with the level of  
CC NOGO. The treatment may further comprise the use of one or more  
CC therapies. In particular, the NOGO-targeting nucleic acid may be used to  
CC treat central nervous system (CNS) injury and cerebrovascular accident  
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
CC disease, muscular dystrophy, and/or other neurodegenerative disease  
CC states which respond to the modulation of NOGO expression. The present  
CC sequence is a hammerhead ribozyme of the invention  
XX  
SQ Sequence 17 BP; 2 A; 4 C; 3 G; 0 T; 8 U; 0 Other;  
Query Match 15.6%; Score 11.4; DB 1; Length 17;  
Best Local Similarity 38.5%; Pred. No. 7.3e+02;  
Matches 5; Conservative 7; Mismatches 1; Indels 0; Gaps 0;  
QY 915 TGGTCTTGGCTT 927  
Db :|:::|:::|:  
5 UGAUCUUUGCCU 17  
RESULT 221  
ABK03202  
ID ABK03202 standard; RNA; 17 BP.  
XX  
AC ABK03202;  
XX  
DT 12-MAR-2002 (first entry)  
XX  
DE Human CD20 Inozyme #153.  
XX  
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;  
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
KW DNazyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;  
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
KW inflammatory arthropathy; central nervous system injury;  
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
KW Parkinson's disease; ataxia; Huntington's disease;  
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
WF WO200159103-A2.  
XX  
PD 16-AUG-2001.  
XX  
PF 09-FEB-2001; 2001WO-US004273.  
XX  
PR 11-FEB-2000; 2000US-0181797P.  
PR 28-FEB-2000; 2000US-0185516P.  
PR 06-MAR-2000; 2000US-0187128P.  
XX



AC ABK25224;  
 XX  
 DT 09-APR-2002 (first entry)  
 XX  
 LE Male-sterile plant producing genome altering oligonucleotide #124.  
 XX  
 XX Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;  
 KW o-methyl modification; LNA modification; phosphorothioate linkage;  
 KW DNA repair; DNA alteration; improved nutritional tolerance; hygromycin-B;  
 KW abiotic stress tolerance; improved nutritional value; hygromycin; primer;  
 KW amino acid over production; herbicide resistance; glyphosate resistance;  
 KW imidazolinone herbicide resistance; sulphonylurea herbicide resistance;  
 KW porphyrin herbicide resistance; triazine resistance; disease resistance;  
 KW modified oil production; modified starch production; waxy starch;  
 KW altered floral morphology; male-sterile plant; albino mutant;  
 KW modified fatty acid content; reduced palmitate production; albino plant;  
 KW increased stearate production; reduced linolenic acid production;  
 KW photosynthetic process.  
 XX  
 OS Lycopersicon esculentum.  
 OS Synthetic.  
 XX  
 FN WO200192512-A2.  
 XX  
 FD 06-DEC-2001.  
 XX  
 PP 01-JUN-2001; 2001WO-US017672.  
 XX  
 XX 01-JUN-2000; 2000US-0208538P.  
 PR 30-OCT-2000; 2000US-0244989P.  
 PR 27-MAR-2001; 2001US-00818875.  
 XX  
 XX (UYDE ) UNIV. DELAWARE.  
 PA  
 XX  
 PI Kmiec EB, Gamper HB, Rice MC, Kim J;  
 XX  
 DR WPI; 2002-106307/14.  
 XX  
 XX New oligonucleotides with modified nuclease-resistant termini, useful for  
 PT creating plants with desired phenotypes, e.g. stress tolerance, improved  
 PT nutritional value, herbicide or disease resistance, or modified oil  
 PT production.  
 PS Claim 7; Page 78; 220pp; English.  
 XX  
 CC The invention relates to an oligonucleotide for targeted alteration of a  
 CC genetic sequence, which comprises a single-stranded oligonucleotide  
 CC having a DNA domain. The DNA domain has at least one mismatch with  
 CC respect to the genetic sequence to be altered and further comprises  
 CC chemical modifications of the oligonucleotide. The chemical modifications  
 CC consist of o-methyl modification, an LNA modification, two or more  
 CC phosphorothioate linkages on a terminus, or a combination of any two or  
 CC more of these modifications. The oligonucleotides are useful for  
 CC directing repair or alteration of plant genetic information. The  
 CC oligonucleotides are particularly useful for creating plants with desired  
 CC phenotypes, e.g. environmental or abiotic stress tolerance, improved  
 CC nutritional value (e.g. altering amino acid content of plants or  
 CC conferring amino acid over production), herbicide resistance (e.g.  
 CC glyphosate resistance, imidazolinone and sulphonylurea herbicide  
 CC resistance, porphyrin herbicide resistance or triazine resistance),  
 CC disease resistance, modified oil production, modified starch production  
 CC (e.g. increased starch or production of waxy starch), altered floral  
 CC morphology (e.g. male-sterile plants) or modified fatty acid content  
 CC (e.g. reduced palmitate, increased stearate or reduced linolenic acid).  
 CC The oligonucleotides are also useful for producing albino mutants for the  
 CC analysis of photosynthetic processes. This sequence represents a genome  
 CC altering oligonucleotide of the invention  
 XX  
 SQ Sequence 17 BP; 8 A; 1 C; 2 G; 6 T; 0 U; 0 Other;  
 Query Match 15.6%; Score 11.4; DB 1; Length 17;  
 Best Local Similarity 92.3%; Pred. No. 7.3e+02;  
 Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 939 CTTCAATTGGTTTA 951  
 DB ||||| |||||  
 15 CTTCAATTAGTTTA 3  
 RESULT 224  
 ABV83099/C  
 ID ABV83099 standard; DNA; 17 BP.  
 XX  
 AC ABV83099;  
 XX  
 DT 03-JAN-2003 (first entry)  
 XX  
 DE Human HTPL scanning oligonucleotide SEQ ID 4345.  
 XX  
 KW Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;  
 KW human testis expressed Patched like protein; testis; adrenal; liver;  
 KW male germ cell development; bone marrow; brain; kidney; lung; placenta;  
 KW prostate; skeletal muscle; colon; male infertility; cancer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FN EP1229046-A2.  
 XX  
 PD 07-AUG-2002.  
 XX  
 PF 28-JAN-2002; 2002EP-00001167.  
 XX  
 PR 30-JAN-2001; 2001WO-US000663.  
 PR 30-JAN-2001; 2001WO-US000664.  
 PR 30-JAN-2001; 2001WO-US000665.  
 PR 30-JAN-2001; 2001WO-US000667.  
 PR 30-JAN-2001; 2001WO-US000668.  
 PR 30-JAN-2001; 2001WO-US000669.  
 PR 23-MAY-2001; 2001US-00864761.  
 PR 09-OCT-2001; 2001US-0327898P.  
 XX  
 PA (AEOM-) ABOMICA INC.  
 XX  
 PI Zhan J;  
 XX  
 DR WPI; 2002-676582/73.  
 XX  
 PT Novel isolated human testis expressed Patched like protein (HTPL), useful  
 PT for identifying agonist and antagonist and specific binding partners, and  
 PT for treating subjects having defects in HTPL.  
 XX  
 PS Example 2; Page 633; 718pp; English.  
 XX  
 CC The present invention relates to human testis expressed Patched like  
 CC protein (HTPL, see ABV78759 to ABV78762 and ABV98519 to ABV98520). HTPL  
 CC has two isoforms, with a few single base pair differences between the  
 CC two. One of the single base pair changes introduces a premature stop  
 CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL  
 CC shares an overall structure organisation with the Patched protein. The  
 CC shared structural features strongly imply that HTPL plays a role similar  
 CC to that of Patched, and is a potential tumour suppressor. HTPL is  
 CC important in regulating male germ cell development, and the HTPL gene was  
 CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are  
 CC useful for diagnosing a disorder caused by mutation in HTPL, and in  
 CC therapy and manufacture of a medicament for treatment or prevention of  
 CC such disorder associated with decreased expression or activity of human  
 CC HTPL. Such disorders include disorders of testis, or adrenal, adult and  
 CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,  
 CC skeletal muscle or colon function. HTPL proteins and nucleic acids are  
 CC clinically useful diagnostic markers and potential therapeutic agents for  
 CC male infertility and cancer. The present oligonucleotide was used in an  
 CC example from the invention  
 XX  
 SQ Sequence 17 BP; 7 A; 4 C; 2 G; 4 T; 0 U; 0 Other;  
 Query Match 15.6%; Score 11.4; DB 1; Length 17;

```
Best Local Similarity 92.3%; Pred. No. 7.3e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

    914 TTGGTCTTTCCT 926
    13 TTGGTCTTTCCT 1

RESULT 225
CS53051
) ACC53051 standard; DNA; 17 BP.
)
) ACC53051;
) 27-JUN-2003 (first entry)
) Human tumour suppressor sequence #1818.
) ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
) tumour regression; apoptosis; virus resistance; diagnosis;
) cellular degeneration.
) Homo sapiens.
) FR2826373-A1.
) 27-DEC-2002.
) 20-JUN-2001; 2001FR-00008139.
) ACC53051;
) 27-JUN-2003 (first entry)
) Human tumour suppressor sequence #1818.
) ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
) tumour regression; apoptosis; virus resistance; diagnosis;
) cellular degeneration.
) Homo sapiens.
) FR2826373-A1.
) 27-DEC-2002.
) 20-JUN-2001; 2001FR-00008139.
) 20-JUN-2001; 2001FR-00008139.
) (MOLE-) MOLECULAR ENGINES LAB SA.
) Tuijnder M, Telerman A, Amson R;
) WPI; 2003-250498/25.
) New nucleic acid sequences associated with tumor suppression, regression,
) apoptosis or virus resistance are useful to diagnose and treat viral
) disease, development of tumor cells and cell degeneration.
) Claim 1; Page 460; 798pp; French.
) This sequence represents an isolated nucleic acid sequence associated
) with tumour suppression or regression, apoptosis or virus resistance. The
) invention relates to these sequences or sequences having at least 80%
) identity to them, and polypeptides encoded by the sequences or
) polypeptides having 80% identity to the polypeptide sequences. The
) invention is used to diagnose or treat viral disease or disease
) characterized by development of tumour cells or cellular degeneration
) Sequence 17 BP; 4 A; 5 C; 2 G; 6 T; 0 U; 0 Other;
)
) Query Match 15.6%; Score 11.4; DB 1; Length 17;
) Best Local Similarity 92.3%; Pred. No. 7.3e+02;
) Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
)
) 935 TCCTCTTCATTGG 947
) 3 TCCTCTTCATTGG 15
)
) This sequence represents an isolated nucleic acid sequence associated
) with tumour suppression or regression, apoptosis or virus resistance. The
) invention relates to these sequences or sequences having at least 80%
) identity to them, and polypeptides encoded by the sequences or
) polypeptides having 80% identity to the polypeptide sequences. The
) invention is used to diagnose or treat viral disease or disease
) characterized by development of tumour cells or cellular degeneration
) Sequence 17 BP; 4 A; 5 C; 2 G; 6 T; 0 U; 0 Other;
)
) Query Match 15.6%; Score 11.4; DB 1; Length 17;
) Best Local Similarity 92.3%; Pred. No. 7.3e+02;
) Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
)
) 935 TCCTCTTCATTGG 947
) 3 TCCTCTTCATTGG 15
)
) SULT 226
CS54365
) ACC54365 standard; DNA; 17 BP.
) ACC54365;
) 27-JUN-2003 (first entry)
) Human tumour suppressor sequence #3132.
```

```
KW ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
KW tumour regression; apoptosis; virus resistance; diagnosis;
KW cellular degeneration.
XX Homo sapiens.
XX OS
XX PN FR2826373-A1.
XX PD 27-DEC-2002.
XX PF 20-JUN-2001; 2001FR-00008139.
XX PR 20-JUN-2001; 2001FR-00008139.
XX PA (MOLE-) MOLECULAR ENGINES LAB SA.
XX PI Tuijnder M, Telerman A, Amson R;
XX DR WPI; 2003-250498/25.
XX PT New nucleic acid sequences associated with tumor suppression, regression,
XX apoptosis or virus resistance are useful to diagnose and treat viral
XX disease, development of tumor cells and cell degeneration.
XX PS Claim 1; Page 763; 798pp; French.
XX CC This sequence represents an isolated nucleic acid sequence associated
XX with tumour suppression or regression, apoptosis or virus resistance. The
XX invention relates to these sequences or sequences having at least 80%
XX identity to them, and polypeptides encoded by the sequences or
XX polypeptides having 80% identity to the polypeptide sequences. The
XX invention is used to diagnose or treat viral disease or disease
XX characterized by development of tumour cells or cellular degeneration
XX SQ Sequence 17 BP; 2 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
)
) Query Match 15.6%; Score 11.4; DB 1; Length 17;
) Best Local Similarity 92.3%; Pred. No. 7.3e+02;
) Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
)
) QY 935 TCCTCTTCATTGG 947
) DB 3 TCCTCTTCATTGG 15
)
) RESULT 227
) ACC52797
) ID ACC52797 standard; DNA; 17 BP.
) AC ACC52797;
) XX 27-JUN-2003 (first entry)
) DT
) DE Human tumour suppressor sequence #1564.
) XX
) ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
) tumour regression; apoptosis; virus resistance; diagnosis;
) cellular degeneration.
) Homo sapiens.
) OS
) PN FR2826373-A1.
) PD 27-DEC-2002.
) PF 20-JUN-2001; 2001FR-00008139.
) PR 20-JUN-2001; 2001FR-00008139.
) PA (MOLE-) MOLECULAR ENGINES LAB SA.
) PI Tuijnder M, Telerman A, Amson R;
) XX
```

DR WPI; 2003-250498/25.  
 XX  
 PT New nucleic acid sequences associated with tumor suppression, regression,  
 PT apoptosis or virus resistance are useful to diagnose and treat viral  
 PT disease, development of tumor cells and cell degeneration.  
 XX  
 PT  
 XX Claim 1; Page 401; 798pp; French.  
 XX  
 CC This sequence represents an isolated nucleic acid sequence associated  
 CC with tumor suppression or regression, apoptosis or virus resistance. The  
 CC invention relates to these sequences or sequences having at least 80%  
 CC identity to them, and polypeptides encoded by the sequences or  
 CC polypeptides having 80% identity to the polypeptide sequences. The  
 CC invention is used to diagnose or treat viral disease or disease  
 CC characterized by development of tumour cells or cellular degeneration  
 XX  
 XX Sequence 17 BP; 3 A; 6 C; 2 G; 6 T; 0 U; 0 Other;  
 SQ  
 Query Match 15.6%; Score 11.4; DB 1; Length 17;  
 Best Local Similarity 92.3%; Pred. No. 7.3e+02;  
 Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 930 ATCCCTCTCTTC 942  
 DB 2 ATCCCTCTCTTC 14  
 RESULT 228  
 ABT39688  
 ID ABT39688 standard; DNA; 17 BP.  
 XX  
 AC ABT39688;  
 XX  
 DT 12-JUN-2003 (first entry)  
 XX  
 DE Tumour suppression related human fukutin oligo SEQ ID No 5325.  
 XX  
 KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;  
 KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;  
 KW schizophrenia; protein chip; gene therapy; tumour suppression;  
 KW human fukutin; ds.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003025175-A2.  
 XX  
 PD 27-MAR-2003.  
 XX  
 PF 17-SEP-2002; 2002WO-IB004208.  
 XX  
 PR 17-SEP-2001; 2001FR-00011978.  
 XX  
 PA (MOLE-) MOLECULAR ENGINES LAB.  
 XX  
 PI Telerman A, Amson R, Tuijnder M;  
 XX  
 WPI; 2003-313353/30.  
 XX  
 PT New isolated nucleic acid, useful for treating viral diseases associated  
 PT with tumors and cell degeneration, also related polypeptides, antibodies  
 PT and transfected cells.  
 XX  
 PS Disclosure; Page 656; 720pp; French.  
 XX  
 CC The invention relates to a novel isolated 17 mer nucleic acid sequence,  
 CC given in the specification, a sequence containing at least 15 consecutive  
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal  
 CC alignment, at least 80 % identity to the 17 mer sequence, or the complement  
 CC hybridizes to them under highly stringent conditions, or the complement  
 CC of any of them, or the corresponding RNA. The novel isolated nucleic  
 CC acids of the invention are useful as probes and primers for detecting,  
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one  
 CC component of a gene chip, in vitro as (anti)sense reagents, and for  
 CC production of recombinant polypeptides. Any of the nucleic acids,  
 CC polypeptides, vectors containing the nucleic acids, cells containing the

CC production of recombinant polypeptides. Any of the nucleic acids,  
 CC polypeptides, vectors containing the nucleic acids, cells containing the  
 CC vector or antibodies directed against the polypeptides are useful for  
 CC preparation of pharmaceuticals for prevention and/or treatment of viral  
 CC diseases that are characterised by development of tumours or cell  
 CC degeneration, specifically cancer but also Alzheimer's disease and  
 CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in  
 CC patient samples is useful for diagnosis and/or prognosis of these  
 CC diseases. The polypeptides can also be used to generate antibodies, and  
 CC both the polypeptide and antibodies are useful as components of protein  
 CC chips. The nucleic acid sequences of the invention can be used in gene  
 CC therapy. This polynucleotide sequence represents a tumour suppression  
 CC related human fukutin oligonucleotide of the invention  
 XX  
 XX Sequence 17 BP; 4 A; 5 C; 2 G; 6 T; 0 U; 0 Other;  
 SQ  
 Query Match 15.6%; Score 11.4; DB 1; Length 17;  
 Best Local Similarity 92.3%; Pred. No. 7.3e+02;  
 Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 935 TCCTCTTCATGG 947  
 DB 3 TCCTCTTCATGG 15  
 RESULT 229  
 ABT37482/C  
 ID ABT37482 standard; DNA; 17 BP.  
 XX  
 AC ABT37482;  
 XX  
 DT 12-JUN-2003 (first entry)  
 XX  
 DE Tumour suppression related human fukutin oligo SEQ ID No 3119.  
 XX  
 KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;  
 KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;  
 KW schizophrenia; protein chip; gene therapy; tumour suppression;  
 KW human fukutin; ds.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003025175-A2.  
 XX  
 PD 27-MAR-2003.  
 XX  
 PF 17-SEP-2002; 2002WO-IB004208.  
 XX  
 PR 17-SEP-2001; 2001FR-00011978.  
 XX  
 PA (MOLE-) MOLECULAR ENGINES LAB.  
 XX  
 PI Telerman A, Amson R, Tuijnder M;  
 XX  
 WPI; 2003-313353/30.  
 XX  
 PT New isolated nucleic acid, useful for treating viral diseases associated  
 PT with tumors and cell degeneration, also related polypeptides, antibodies  
 PT and transfected cells.  
 XX  
 PS Disclosure; Page 398; 720pp; French.  
 XX  
 CC The invention relates to a novel isolated 17 mer nucleic acid sequence,  
 CC given in the specification, a sequence containing at least 15 consecutive  
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal  
 CC alignment, at least 80 % identity to the 17 mer sequence, or the complement  
 CC hybridizes to them under highly stringent conditions, or the complement  
 CC of any of them, or the corresponding RNA. The novel isolated nucleic  
 CC acids of the invention are useful as probes and primers for detecting,  
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one  
 CC component of a gene chip, in vitro as (anti)sense reagents, and for  
 CC production of recombinant polypeptides. Any of the nucleic acids,  
 CC polypeptides, vectors containing the nucleic acids, cells containing the

vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention

Sequence 17 BP; 8 A; 2 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 15.6%; Score 11.4; DB 1; Length 17;  
Best Local Similarity 92.3%; Pred. No. 7.3e+02;  
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
919 CTTTGCCCTTTAT 931  
|||||||  
17 CTTTGCCCTTAAT 5

RESULT 230

ACDS0660 standard; RNA; 17 BP.

ACDS0660;

23-SEP-2003 (first entry)

HBV hammerhead ribozyme substrate sequence #177.

Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
RNA stability; RNA expression; RNA synthesis; antisense;  
enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;  
ambrzyme; G-cleaver ribozyme; decoy molecule; aptamer;  
HBV reverse transcriptase; Enhancer I region; viral replication;  
degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
virucide; antiinflammatory; substrate; ss.

Hepatitis B virus.

WO200281494-A1.

17-OCT-2002.

26-MAR-2002; 2002WO-US009187.

26-MAR-2001; 2001US-00817879.

08-JUN-2001; 2001US-00877478.

08-JUN-2001; 2001US-0296876P.

24-OCT-2001; 2001US-0335059P.

05-DEC-2001; 2001US-0337055P.

(RIBO-) RIBOZYME PHARM INC.

(BLAT/) BLATT L.

(MACE/) MACEJAK D.

(MCSW/) MCSWIGGEN J.

(MORR/) MORRISSEY D.

(PAVC/) PAVCO P.

(LEEF/) LEE P.

(DRAP/) DRAPER K.

(ROBE/) ROBERTS E.

Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;

Draper K, Roberts E;

WPI; 2003-229207/22.

Novel compound useful for treating cirrhosis, liver failure,  
hepatocellular carcinoma, or condition associated with hepatitis C virus

PT infection.

XX Example 1; Page 139; 387pp; English.

XX The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNzymes, inozymes, zinzymes, ambrzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase and/or HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HBV ribozyme, inozyme, G-cleaver, zinzyme, DNzyme or ambrzyme sequences disclosed in the present invention

SQ Sequence 17 BP; 3 A; 4 C; 1 G; 0 T; 9 U; 0 Other;

Query Match 15.6%; Score 11.4; DB 1; Length 17;

Best Local Similarity 30.8%; Pred. No. 7.3e+02;

Matches 4; Conservative 8; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTCTTTGGTC 919

|||||

Db 5 AUUUUUUUUGUC 17

RESULT 231

ACDS0665

ID ACDS0665 standard; RNA; 17 BP.

XX AC

XX ACDS0665;

XX DT 23-SEP-2003 (first entry)

XX DE HBV hammerhead ribozyme substrate sequence #182.

Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
RNA stability; RNA expression; RNA synthesis; antisense;  
enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;  
ambrzyme; G-cleaver ribozyme; decoy molecule; aptamer;  
HBV reverse transcriptase; Enhancer I region; viral replication;  
degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
virucide; antiinflammatory; substrate; ss.

OS Hepatitis B virus.

XX WO200281494-A1.

PN 17-OCT-2002.

PD 26-MAR-2002; 2002WO-US009187.

XX PR 26-MAR-2001; 2001US-00817879.

PR 08-JUN-2001; 2001US-00877478.

PR 08-JUN-2001; 2001US-0296876P.

PR 24-OCT-2001; 2001US-0335059P.

PR 05-DEC-2001; 2001US-0337055P.

XX (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MACE/) MACEJAK D.

PA (MCSW/) MCSWIGGEN J.

PA (MORR/) MORRISSEY D.

PA (PAVC/) PAVCO P.



the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia). Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal expression of the nucleotides.

Sequence 17 BP; 2 A; 2 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 15.6%; Score 11.4; DB 1; Length 17;

Best Local Similarity 92.3%; Pred. No. 7.3e+02;

Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

911 TCTTTGGTCTTGG 923

|||||  
3 TCTTTGGTCTTGG 15

RESULT 234

ADB42008/C

ADB42008 standard; DNA; 17 BP.

ADB42008;

18-DEC-2003 (revised)

04-DEC-2003 (first entry)

Tumour suppression/reversion associated nucleotide #2331.

cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;

primer; probe; tumour suppression; tumour reversion; apoptosis;

virus resistance; transgenic animals; Alzheimer's disease; schizophrenia; diagnosis.

Homo sapiens.

WO2003040369-A2.

15-MAY-2003.

17-SEP-2002; 2002WO-IB004219.

17-SEP-2001; 2001FR-00011981.

(MOLE-) MOLECULAR ENGINES LAB.

Telerman A, Amson R, Tuijnder M;

WPI; 2003-441574/41.

New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.

Disclosure; Page 304; 771pp; French.

The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro

sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia). Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal expression of the nucleotides.

Sequence 17 BP; 9 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 15.6%; Score 11.4; DB 1; Length 17;

Best Local Similarity 92.3%; Pred. No. 7.3e+02;

Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 905 TCATTTCCTTGG 917

|||||  
16 TCATTTCCTTGG 4

RESULT 235

ADB45411

ID ADB45411 standard; DNA; 17 BP.

AC ADB45411;

18-DEC-2003 (first entry)

Tumour suppression/reversion associated nucleotide #5734.

cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;

primer; probe; tumour suppression; tumour reversion; apoptosis;

virus resistance; transgenic animals; Alzheimer's disease; schizophrenia; diagnosis.

Homo sapiens.

WO2003040369-A2.

15-MAY-2003.

17-SEP-2002; 2002WO-IB004219.

17-SEP-2001; 2001FR-00011981.

(MOLE-) MOLECULAR ENGINES LAB.

Telerman A, Amson R, Tuijnder M;

WPI; 2003-441574/41.

New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.

Disclosure; Page 702; 771pp; French.

The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and



CC cells containing the vectors), the encoded polypeptides and antibodies  
 CC (Ab) against the polypeptide are useful for prevention and/or treatment  
 CC of viral infections or diseases characterized by development of tumours  
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).  
 CC Analysis of the expression of the nucleotides can be used for diagnosis  
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can  
 CC also be used to screen for their specific interactive molecules,  
 CC potentially useful for treating diseases associated with abnormal  
 CC expression of the nucleotides.  
 SQ Sequence 17 BP; 5 A; 3 C; 1 G; 8 T; 0 U; 0 Other;  
 Query Match 15.6%; Score 11.4; DB 1; Length 17;  
 Best Local Similarity 92.3%; Pred. No. 7.3e+02;  
 Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Q/ 903 GGTCATTTCTTT 915  
 | | | | | | | | | |  
 Db 1 GATCATTTCTTT 13  
 RESULT 236  
 ADB4471  
 ID ADB44471 standard; DNA; 17 BP.  
 AC ADB44471;  
 XX  
 AC ADB44471;  
 XX  
 DT 18-DEC-2003 (first entry)  
 XX  
 DE Tumour suppression/reversion associated nucleotide #4794.  
 XX  
 KW cytostatic; antiviral; neuroprotective; nontropic; neuroleptic; ss;  
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;  
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;  
 KW diagnosis.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003040369-A2.  
 XX  
 PJ 15-MAY-2003.  
 XX  
 PF 17-SEP-2002; 2002WO-IB004219.  
 XX  
 PX 17-SEP-2001; 2001FR-00011991.  
 XX  
 PA (MOLE-) MOLECULAR ENGINES LAB.  
 XX  
 PI Telerman A, Amson R, Tuijnder M;  
 XX  
 DR WPI; 2003-441574/41.  
 XX  
 PT New nucleic acid encoding human prostate membrane-specific antigen,  
 PT useful e.g. for treatment of tumors and viral infection, also related  
 PT polypeptide and antibodies.  
 XX  
 PS Disclosure; Page 592; 771pp; French.  
 XX  
 CC The invention relates to the isolation of 6327 nucleotide sequences,  
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a  
 CC sequence having at least 80% identity, after optimal alignment, with the  
 CC nucleotides, a sequence that hybridizes under stringent conditions with  
 CC the nucleotides, or the complement, or corresponding RNA, of the  
 CC nucleotides. The nucleotides are used as probes or primers for detecting,  
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro  
 CC sense and antisense sequences, of nucleotides involved in tumour  
 CC suppression or reversion, apoptosis and/or viral resistance, to produce  
 CC recombinant polypeptides, and to prepare transgenic animals, as  
 CC experimental models. The nucleotides (also vectors containing them and  
 CC cells containing the vectors), the encoded polypeptides and antibodies  
 CC (Ab) against the polypeptide are useful for prevention and/or treatment  
 CC of viral infections or diseases characterized by development of tumours  
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).

CC Analysis of the expression of the nucleotides can be used for diagnosis  
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can  
 CC also be used to screen for their specific interactive molecules,  
 CC potentially useful for treating diseases associated with abnormal  
 CC expression of the nucleotides.  
 SQ Sequence 17 BP; 4 A; 5 C; 2 G; 6 T; 0 U; 0 Other;  
 Query Match 15.6%; Score 11.4; DB 1; Length 17;  
 Best Local Similarity 92.3%; Pred. No. 7.3e+02;  
 Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Q/ 935 TCCTCTTCATGG 947  
 | | | | | | | | | |  
 Db 3 TCCTCTTCATGG 15  
 RESULT 237  
 ADC70411  
 ID ADC70411 standard; DNA; 17 BP.  
 AC ADC70411;  
 XX  
 AC ADC70411;  
 XX  
 DT 18-DEC-2003 (first entry)  
 XX  
 DE Primer oligo used for analysing CpG islands in genomic DNA (SeqID 901).  
 XX  
 KW PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide;  
 KW adenocarcinoma; squamous cell carcinoma; cytostatic; probe; PNA-oligomer;  
 KW cytosine methylation state.  
 XX  
 OS Unidentified.  
 XX  
 PN WO2003052135-A2.  
 XX  
 PJ 26-JUN-2003.  
 XX  
 PF 10-DEC-2002; 2002WO-EP014026.  
 XX  
 PX 14-DEC-2001; 2001DE-01061625.  
 XX  
 PA (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Burger M, Field JK, Genc B, Liloglou T, Lipscher E, Maier S;  
 PI Nimmrich I;  
 XX  
 DR WPI; 2003-533029/50.  
 XX  
 PT Detecting and differentiating cytosine methylation state of genomic DNA,  
 PT useful for diagnosing, treating prognosticating and/or monitoring lung  
 PT cell proliferative disorders e.g. adenocarcinoma and squamous cell  
 PT carcinoma.  
 XX  
 PS Claim 15; SEQ ID NO 901; 58pp; English.  
 XX  
 CC This invention relates to a novel method for detecting and  
 CC differentiating between lung cell proliferative disorders associated with  
 CC at least one gene and/or their regulatory regions. Specifically, it  
 CC refers to a method comprising contacting a target nucleic acid in a  
 CC biological sample with at least one reagent, wherein the reagent is able  
 CC to distinguish between methylated and non-methylated CpG dinucleotides  
 CC present in the target DNA. As such, it is possible to further  
 CC differentiate and diagnose medical conditions including adenocarcinoma  
 CC and squamous cell carcinoma, and their respective adjacent lung tissue.  
 CC The present invention describes cytosine oligomers and PNA-oligomers  
 CC that are useful as probes for determining the cytosine methylation state  
 CC of single nucleotide polymorphisms (SNPs) of the target sequence. This  
 CC oligonucleotide sequence is a primer oligomer used for the analysis of  
 CC CpG positions within genomic DNA, used in an exemplification of the  
 CC invention.  
 SQ Sequence 17 BP; 1 A; 8 C; 1 G; 7 T; 0 U; 0 Other;

```

Query Match          15.6%; Score 11.4; DB 1; Length 17;
Best Local Similarity 92.3%; Pred. No. 7.3e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

/ 899 CCTGTGTCATTTT 911
  ||||| |||||
  5 CCTGTGTCATTTT 17

RESULT 238
JC70430
) ADC70430 standard; DNA; 17 BP.
{
{ ADC70430;
{
{ 18-DEC-2003 (first entry)
{ PCR primer 2 used to amplify RARB to identify CpG islands.
{ PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide;
{ adenocarcinoma; squamous cell carcinoma; cytostatic; probe; PNA-oligomer;
{ cytosine methylation state; RARB.
{ Unidentified.
{ WO2003052135-A2.
{ 26-JUN-2003.
{ 10-DEC-2002; 2002WO-EP014026.
{ 14-DEC-2001; 2001DE-01061625.
{ (EPiG-) EPIGENOMICS AG.
{ Burger M, Field JK, Genc B, Lilloglou T, Lipscher E, Maier S;
{ Nimmrich I;
{ WPI; 2003-533029/50.
{ Detecting and differentiating cytosine methylation state of genomic DNA,
{ useful for diagnosing, treating prognosticating and/or monitoring lung
{ cell proliferative disorders e.g. adenocarcinoma and squamous cell
{ carcinoma.
{ Example 3; Page 19; 58pp; English.
{ This invention relates to a novel method for detecting and
{ differentiating between lung cell proliferative disorders associated with
{ at least one gene and/or their regulatory regions. Specifically, it
{ refers to a method comprising contacting a target nucleic acid in a
{ biological sample with at least one reagent, wherein the reagent is able
{ to distinguish between methylated and non-methylated CpG dinucleotides
{ present in the target DNA. As such, it is possible to further
{ differentiate and diagnose medical conditions including adenocarcinoma
{ and squamous cell carcinoma, and their respective adjacent lung tissue.
{ The present invention describes cytostatic oligomers and PNA-oligomers
{ that are useful as probes for determining the cytosine methylation state
{ or single nucleotide polymorphisms (SNPs) of the target sequence. This
{ oligonucleotide sequence is the PCR primer 2 used to amplify the RARB
{ gene to identify the methylation status of a specific CpG site, used in
{ an exemplification of the invention.
{ Sequence 17 BP; 1 A; 8 C; 1 G; 7 T; 0 U; 0 Other;

Query Match          15.6%; Score 11.4; DB 1; Length 17;
Best Local Similarity 92.3%; Pred. No. 7.3e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

899 CCTGTGTCATTTT 911
  ||||| |||||
  5 CCTGTGTCATTTT 17

RESULT 239
JC70409
) ADC70409 standard; DNA; 17 BP.
{
{ ADC70409;
{
{ 18-DEC-2003 (first entry)
{ PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide;
{ adenocarcinoma; squamous cell carcinoma; cytostatic; probe; PNA-oligomer;
{ cytosine methylation state.
{ Unidentified.
{ WO2003052135-A2.
{ 26-JUN-2003.
{ 10-DEC-2002; 2002WO-EP014026.
{ 14-DEC-2001; 2001DE-01061625.
{ (EPiG-) EPIGENOMICS AG.
{ Burger M, Field JK, Genc B, Lilloglou T, Lipscher E, Maier S;
{ Nimmrich I;
{ WPI; 2003-533029/50.
{ Detecting and differentiating cytosine methylation state of genomic DNA,
{ useful for diagnosing, treating prognosticating and/or monitoring lung
{ cell proliferative disorders e.g. adenocarcinoma and squamous cell
{ carcinoma.
{ Claim 15; SEQ ID NO 899; 58pp; English.
{ This invention relates to a novel method for detecting and
{ differentiating between lung cell proliferative disorders associated with
{ at least one gene and/or their regulatory regions. Specifically, it
{ refers to a method comprising contacting a target nucleic acid in a
{ biological sample with at least one reagent, wherein the reagent is able
{ to distinguish between methylated and non-methylated CpG dinucleotides
{ present in the target DNA. As such, it is possible to further
{ differentiate and diagnose medical conditions including adenocarcinoma
{ and squamous cell carcinoma, and their respective adjacent lung tissue.
{ The present invention describes cytostatic oligomers and PNA-oligomers
{ that are useful as probes for determining the cytosine methylation state
{ or single nucleotide polymorphisms (SNPs) of the target sequence. This
{ oligonucleotide sequence is a primer oligomer used for the analysis of
{ CpG positions within genomic DNA, used in an exemplification of the
{ invention.
{ Sequence 17 BP; 1 A; 8 C; 1 G; 7 T; 0 U; 0 Other;

Query Match          15.6%; Score 11.4; DB 1; Length 17;
Best Local Similarity 92.3%; Pred. No. 7.3e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 899 CCTGTGTCATTTT 911
  ||||| |||||
  5 CCTGTGTCATTTT 17

Db 5 CCTGTGTCATTTT 17

RESULT 240
AAA40694
ID AAA40694 standard; DNA; 16 BP.
XX
AC AAA40694;
XX
XX 15-AUG-2000 (first entry)

```

XX Human CD36 polymorphism sequence variant oligonucleotide SEQ ID NO:186.  
DE Human; rat; CD36; SHR; spontaneous hypertensive rat; diagnosis; therapy;  
FW screening; polymorphism; variant; detection; mutant; blood; mutation;  
KW insulin; glucose metabolism; fatty acid metabolism; catecholamine;  
KW malaria; infection; parasite; antiparasitic; antidiabetic; primer; ss.  
XX  
CS Homo sapiens.  
CS Synthetic.  
XX  
XX WO200019883-A2.  
XX  
XX 13-APR-2000.  
XX  
XX 07-OCT-1999; 99WO-US023418.  
XX  
XX 07-OCT-1998; 98US-00167750.  
XX 28-DEC-1998; 98US-00221222.  
XX 17-MAR-1999; 99US-00270542.  
XX  
XX (MEDI-) MEDICAL RES COUNCIL.  
FA (SCIO-) SCIOS INC.  
FA (AITM/) AITMAN T J.  
FA (SCOT/) SCOTT J.  
FA (STAN/) STANTON L W.  
XX  
XX Aitman TJ, Scott J, Stanton LW;  
PI WPI; 2000-303596/26.  
XX  
XX Nucleic acids encoding mutant CD36 proteins useful for preventing,  
FT diagnosing and treating parasitic infections, especially malaria.  
XX  
XX Disclosure; Page 95; 167pp; English.  
XX  
XX The present invention describes isolated nucleic acid molecules (A)  
CC encoding mutant CD36 proteins (B). Parasites such as Plasmodium  
CC falciparum (the major cause of malaria) are unable to utilise the mutated  
CC proteins to gain entry to, and infect cells. The mutant CD36 proteins do  
CC not function correctly preventing parasites utilising them to infect  
CC cells. The nucleic acids may be used for the recombinant production of  
CC mutant CD36 proteins according to standard methodologies. They may be  
CC used in this way to prevent and treat parasitic infections that utilise  
CC the CD36 protein to infect cells, such as P. falciparum, the major cause  
CC of malaria. For example, the protein may be used to identify modulators  
CC of CD36 expression and activity or a patient's CD36 DNA may be screened  
CC to determine whether there are any mutations present that may confer  
CC resistance to parasitic infections. The proteins and nucleic acids may  
CC also be used to prevent, diagnose and treat diseases associated with  
CC defects in insulin action and/or glucose metabolism and/or fatty acid  
CC metabolism and/or catecholamine action in subjects possessing mutations  
CC in the CD36 genes. AAA40606 to AAA40759, and AAB02515 to AAB02564,  
CC represent nucleotide and amino acid sequences respectively which are used  
CC in the exemplification of the present invention  
XX  
SQ Sequence 16 BP; 2 A; 4 C; 2 G; 8 T; 0 U; 0 Other;  
  
Query Match 15.3%; Score 11.2; DB 1; Length 16;  
Best Local Similarity 81.2%; Pred. No. 7.6e+02;  
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 936 CCTCTTCATTGGTTTA 951  
DB 1 CCTATTCTTGGCTTA 16  
  
RESULT 241  
AAQ36488  
ID AAQ36488 standard; DNA; 17 BP.  
XX  
AC AAQ36488;  
XX

DT 04-JUN-1993 (first entry)  
XX  
DE Mycoplasma primer/probe 19.  
XX  
KW Detection; mycoplasma; primer; PCR polymerase chain reaction; amplify;  
KW probe; ss.  
XX  
OS Synthetic.  
XX  
XX JP05000088-A.  
XX  
XX 08-JAN-1993.  
XX  
XX 25-JUN-1991; 91JP-00153541.  
XX  
XX 25-JUN-1991; 91JP-00153541.  
XX (WAKT) WAKUNAGA SEIYAKU KK.  
XX (DAIN) DAINIPPON PHARM CO LTD.  
XX  
XX WPI; 1993-049152/06.  
XX  
XX New nucleic acid fragment - useful for detection of mycoplasma.  
XX  
XX Disclosure; Page 14; 16pp; Japanese.  
XX  
XX The sequences given in AAQ36470-97 are nucleic acid fragments which may  
CC be used in a method for detecting mycoplasma. The primers are used to  
CC amplify a fragment which is then detected using a probe. The method has  
CC good sensitivity, specificity, rapidity and ease of operation  
XX  
SQ Sequence 17 BP; 3 A; 4 C; 2 G; 8 T; 0 U; 0 Other;  
  
Query Match 15.3%; Score 11.2; DB 1; Length 17;  
Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 928 TTATCCCTCTCTTCA 943  
DB 2 TTATCTCTCGCTTGA 17  
  
RESULT 242  
AAQ47888  
ID AAQ47888 standard; DNA; 17 BP.  
XX  
AC AAQ47888;  
XX  
XX 25-MAR-2003 (revised)  
XX 28-MAR-1994 (first entry)  
XX  
XX SSP for flavonoid-3',5'-hydroxylase gene.  
XX  
XX Flavonoid-3',5'-hydroxylase; transformation; plants; petunia; rose;  
KW tobacco; pigment alteration; blue; SSP; single specific primer; PCR;  
KW polymerase chain reaction; amplification; expression; ss.  
XX  
OS Synthetic.  
XX  
XX WO9318155-A1.  
XX  
XX 16-SEP-1993.  
XX  
XX 20-NOV-1992; 92WO-JP001520.  
XX  
XX 02-MAR-1992; 92JP-00044963.  
XX  
XX (KYOW) KYOWA HAKKO KOGYO CO LTD.  
XX  
XX Kikuchi Y, Kiyokawa S, Shimada Y, Ohbayashi M, Shimada R;  
PI Okinaka Y;  
XX  
XX WPI; 1993-303469/38.  
DR

Gene coding for flavonoid-3',5'-hydroxylase of petunia petals - used to transform plants e.g. petunia, rose or tobacco to give blue flower colour and altered pigment pattern.

Claim 11; Page 62; 82pp; Japanese.

Insertion of the sequences (AAQ47840-42) into plants such as rose, petunia, tobacco and carnation, using a suitable vector such as agrobacterium, give transformed plants which express the gene, resulting in petals with a blue colour than normal, and/or pigmentation patterns which do not occur naturally. The sequences were amplified using primers (AAQ47843-70). Related single specific primers using a gene sequence coding for the haem-binding region of cytochrome P450 are shown in (AAQ47871-Q47903). (Updated on 25-MAR-2003 to correct PN field.)

Sequence 17 BP; 2 A; 5 C; 4 G; 5 T; 0 U; 1 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;  
Best Local Similarity 76.5%; Pred. No. 7.9e+02;  
Matches 13; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

900 CCTGGTCATTTCTTTG 916  
||| ||| ||| ||| |||  
1 CCGGGGCATATCTTCG 17

RESULT 243

AAQ72496/c

AAQ72496 standard; DNA; 17 BP.

AAQ72496;

25-MAR-2003 (revised)

23-JUN-1995 (first entry)

Melanoma cell line LB-33-MEL cDNA PCR primer CHO910.

Tumour antigen rejection precursor; melanoma antigen-3; MAGE-3; cancer; cytolytic T cells; antigen B; human leucocyte antigen; cell line LB-33-MEL; PCR primer CHO10; ss.

Synthetic.

WO9423031-A1.

13-OCT-1994.

17-MAR-1994; 94WO-US002877.

26-MAR-1993; 93US-00037230.

(LUDW-) LUDWIG INST CANCER RES.

Gaugler B, Van Den Eynde B, Boon-Falleur T, Van Der Bruggen P;

WPI; 1994-333192/41.

New tumour rejection antigen precursor MAGE3 - useful in treatment and diagnosis of cancer.

Example 32; Page 35; 105pp; English.

AAQ72495 and AAQ72496 are a pair of primers for the PCR amplification of the melanoma cell line LB-33-MEL cDNA, they also correspond to regions of the melanoma antigens 1, 2 and 3. Melanoma antigen-3 (MAGE-3), is a tumour rejection antigen precursor, melanomas characterised by the expression of MAGE-3 can be detected, or monitored, by contacting a test sample with an agent that can recognise MAGE-3. The melanoma can be treated by the administration of cytolytic T cells specific for the complex of antigen D (the mature rejection antigen derived from MAGE-3) and a human leucocyte antigen (esp. HLA-A1). (Updated on 25-MAR-2003 to correct PN field.)

XX

SQ Sequence 17 BP; 6 A; 2 C; 9 G; 0 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;  
Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 927 TTTATCCCTCCTCTTC 942  
||| ||| ||| ||| |||  
Db 16 TTGGCCCTCTCTCTTC 1

RESULT 244

AAT05088/c

ID AAT05088 standard; DNA; 17 BP.

XX AAT05088;

XX 25-MAR-2003 (revised)

DT 18-MAR-1996 (first entry)

XX MAGE PCR primer CHO10.

XX MAGE-6; melanoma; tumour rejection antigen; cancer; diagnosis;  
XX polymerase chain reaction; PCR; primer; ss.

XX Synthetic.

XX WO9523874-A1.

XX 08-SEP-1995.

XX 23-FEB-1995; 95WO-US002203.

XX 01-MAR-1994; 94US-00204727.

XX 10-MAR-1994; 94US-00209172.

XX 01-SEP-1994; 94US-00299849.

XX 30-NOV-1994; 94US-00346774.

XX (LUDW-) LUDWIG INST CANCER RES.

XX De Plaen E, Boon-Falleur T, Lethe B, Szikora J, De Smet C;

XX Chomez P, Gaugler B, Van Den Eynde B, Brasseur F, Patard J;

XX Weynants P, Marchand M, Van Der Bruggen P;

XX WPI; 1995-320586/41.

XX Example 32; Page 35; 121pp; English.

XX Primers CHO9 and CHO10 (AAT05087-88) correspond to regions of exon 3 of tumor rejection antigen precursor MAGE-1, MAGE-2 and MAGE-3 genes. They were used to amplify human melanoma cell line LB-33-MEL cDNA. A PCR product was obtained that differed from previously identified MAGE 1, 2, 3, 4, and 5 genes, and was named MAGE 6 (AAT01166). (Updated on 25-MAR-2003 to correct PI field.)

XX Sequence 17 BP; 6 A; 2 C; 9 G; 0 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;  
Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 927 TTTATCCCTCCTCTTC 942  
||| ||| ||| ||| |||  
Db 16 TTGGCCCTCTCTCTTC 1

RESULT 245

AAT81160/c

ID AAT81160 standard; RNA; 17 BP.

```

XX AAT81160;
AC
XX 29-SEP-1997 (first entry)
DT
XX Human c-myb hammerhead ribozyme target sequence (nt. position 991).
DE
XX Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human;
KW
XX smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb;
KW
XX coronary angioplasty; ss.
XX
XX Homo sapiens.
OS
XX
XX WO9531541-A2.
XX
XX 23-NOV-1995.
XX
XX 18-MAY-1995; 95WO-US006368.
XX
XX 18-MAY-1994; 94US-00245466.
PR
XX 13-JAN-1995; 95US-00373124.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Stinchcomb DT, Draper K, Mcswiggen J, Jarvis T;
XX
XX WPI; 1996-010927/01.
XX
XX New enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myb,
XX for treating restenosis or cancer.
XX
XX Claim 1; Page 67; 128pp; English.
XX
XX The present sequence represents the preferred target sequence for an
XX enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
XX the human c-myb sequence at the base position indicated in the descriptor
XX line. The c-myb sequence was screened for optimal ribozyme target sites
XX using a computer folding algorithm, and regions of the mRNA which did not
XX form secondary folding structures and contained potential ribozyme
XX cleavage sites were identified. Ribozymes were synthesised and their
XX activities optimised by either varying the length of the binding arms or
XX by modification to prevent degradation by nucleases. The ribozymes cleave
XX the c-myb sequence and can be used to prevent smooth muscle cell
XX hyperproliferation in restenosis, especially after coronary angioplasty,
XX and in cancers
XX
XX Sequence 17 BP; 5 A; 2 C; 4 G; 0 T; 6 U; 0 Other;
SQ
XX
XX Query Match 15.3%; Score 11.2; DB 1; Length 17;
XX Best Local Similarity 81.2%; Pred. No. 7.9e+02;
XX Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX Qy 948 TTTAATGTATCGCTAC 963
XX ||||| |||||
XX Db 17 TTACATGTATCGCTAC 2
XX
XX RESULT 246
XX PAT81161/C
XX
XX 1D AAT81161 standard; RNA; 17 BP.
XX
XX AC AAT81161;
XX
XX 29-SEP-1997 (first entry)
XX
XX Human c-myb hammerhead ribozyme target sequence (nt. position 992).
XX
XX Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human;
XX
XX smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb;
XX
XX coronary angioplasty; ss.
XX
XX Homo sapiens.
OS
XX

```

```

PN WO9531541-A2.
XX
XX 23-NOV-1995.
XX
XX 18-MAY-1995; 95WO-US006368.
XX
XX 18-MAY-1994; 94US-00245466.
PR
XX 13-JAN-1995; 95US-00373124.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Stinchcomb DT, Draper K, Mcswiggen J, Jarvis T;
XX
XX WPI; 1996-010927/01.
XX
XX New enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myb,
XX for treating restenosis or cancer.
XX
XX Claim 1; Page 67; 128pp; English.
XX
XX The present sequence represents the preferred target sequence for an
XX enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
XX the human c-myb sequence at the base position indicated in the descriptor
XX line. The c-myb sequence was screened for optimal ribozyme target sites
XX using a computer folding algorithm, and regions of the mRNA which did not
XX form secondary folding structures and contained potential ribozyme
XX cleavage sites were identified. Ribozymes were synthesised and their
XX activities optimised by either varying the length of the binding arms or
XX by modification to prevent degradation by nucleases. The ribozymes cleave
XX the c-myb sequence and can be used to prevent smooth muscle cell
XX hyperproliferation in restenosis, especially after coronary angioplasty,
XX and in cancers
XX
XX Sequence 17 BP; 6 A; 2 C; 4 G; 0 T; 5 U; 0 Other;
SQ
XX
XX Query Match 15.3%; Score 11.2; DB 1; Length 17;
XX Best Local Similarity 81.2%; Pred. No. 7.9e+02;
XX Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX Qy 948 TTTAATGTATCGCTAC 963
XX ||||| |||||
XX Db 16 TTACATGTATCGCTAC 1
XX
XX RESULT 247
XX AAT81530
XX ID AAT81530 standard; RNA; 17 BP.
XX
XX AC AAT81530;
XX
XX 14-DEC-1997 (first entry)
XX
XX Human c-myb hammerhead ribozyme target sequence (nt. position 2779).
XX
XX Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human;
XX
XX smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb;
XX
XX coronary angioplasty; ss.
XX
XX Homo sapiens.
OS
XX
XX WO9531541-A2.
XX
XX 23-NOV-1995.
XX
XX 18-MAY-1995; 95WO-US006368.
XX
XX 18-MAY-1994; 94US-00245466.
PR
XX 13-JAN-1995; 95US-00373124.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Stinchcomb DT, Draper K, Mcswiggen J, Jarvis T;
XX

```

WPI; 1996-010927/01.  
New enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myc, for treating restenosis or cancer.

Claim 1; Page 77; 128pp; English.

The present sequence represents the preferred target sequence for an enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves the human c-myc sequence at the base position indicated in the descriptor line. The c-myc sequence was screened for optimal ribozyme target sites using a computer folding algorithm, and regions of the mRNA which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesised and their activities optimised by either varying the length of the binding arms or by modification to prevent degradation by nucleases. The ribozymes cleave the c-myc sequence and can be used to prevent smooth muscle cell hyperproliferation in restenosis, especially after coronary angioplasty, and in cancers

Sequence 17 BP; 3 A; 3 C; 4 G; 0 T; 7 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;  
Best Local Similarity 37.5%; Pred. No. 7.9e+02;  
Matches 6; Conservative 7; Mismatches 3; Indels 0; Gaps 0;

913 TTGGTCTTGGCTTT 928  
1 UAUGGCUAGCCUGU 16

RESULT 248  
X68324/C  
AA68824 standard; RNA; 17 BP.

AA68824;

28-JUL-1999 (first entry)

Human flt1 VEGF receptor hammerhead ribozyme substrate #119.

Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor; foetal liver kinase 1; ss.

Homo sapiens.

WO9715662-A2.

01-MAY-1997.

25-OCT-1996; 96WO-US017480.

26-OCT-1995; 95US-0005974P.

11-JAN-1996; 96US-00584040.

(RIBO-) RIBOZYME PHARM INC.  
(CHIR) CHIRON CORP.

Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;

WPI; 1997-259017/23.

Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.

Claim 4; Page 50; 218pp; English.

The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more

receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAX67275 to AAX75752 represent specific examples of nucleic acid molecules from the present invention

Sequence 17 BP; 9 A; 3 C; 3 G; 0 T; 2 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;  
Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 909 TTCTTTTGGTCTTTC 924

DB 17 TTCTTTTGTACGTTGC 2

RESULT 249

AA670124

ID AAX70124 standard; RNA; 17 BP.

XX AC AAX70124;

XX DT 28-JUL-1999 (first entry)

XX DE Human flt1 VEGF receptor hammerhead ribozyme substrate #1419.

Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor; foetal liver kinase 1; ss.

XX OS Homo sapiens.

XX PN WO9715662-A2.

XX PD 01-MAY-1997.

XX PF 25-OCT-1996; 96WO-US017480.

XX PR 26-OCT-1995; 95US-0005974P.

XX PR 11-JAN-1996; 96US-00584040.

XX PR (RIBO-) RIBOZYME PHARM INC.

XX PA (CHIR) CHIRON CORP.

XX PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;

XX WPI; 1997-259017/23.

Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.

XX Claim 4; Page 89; 218pp; English.

The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAX67275 to AAX75752 represent specific examples of nucleic acid molecules from the present invention

XX Sequence 17 BP; 2 A; 4 C; 1 G; 0 T; 10 U; 0 Other;







CC cleave target nucleic acid, particularly for treating systemic diseases  
 CC caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic  
 CC ascites and infection. They may also be used to detect genetic drift and  
 CC mutations in diseased cells and to determine c-raf RNA. Specifically NACs  
 CC with RNA-cleaving activity that modulate expression of the Raf gene, are  
 CC used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or  
 CC generally any condition associated with the level of c-raf. Introduction  
 CC of sugar/phosphate modifications increases stability against nuclease and  
 CC activity. AAV90922 to AAV93877 represent NACs that can be used in the  
 CC method, specifically for modulating the expression of a Raf gene  
 XX  
 XX Sequence 17 BP; 3 A; 5 C; 3 G; 0 T; 6 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;  
 Best Local Similarity 43.8%; Pred. No. 7.9e+02;  
 Matches 7; Conservative 6; Mismatches 3; Indels 0; Gaps 0;

QY 934 CTCCTCTTCATTGGTT 949

DB 1 CUCACUUCAGUGGCU 16

RESULT 254  
 AAX84106/c  
 ID AAX84106 standard; DNA; 17 BP.

AC AAX84106;

DB 08-SEP-1999 (first entry)

DE PCR primer for MAGE gene exon 3.

XX Tumour rejection antigen; vaccine; cancer; MAGE; PCR primer; ss.

XX Synthetic.

OS Homo sapiens.

XX US5925729-A.

XX 20-JUL-1999.

XX 02-MAY-1994; 94US-00142368.

XX 23-MAY-1991; 91US-00705702.

PR 09-JUL-1991; 91US-00728838.

PR 23-SEP-1991; 91US-00764365.

PR 12-DEC-1991; 91US-00807043.

XX (LUDW-) LUDWIG INST CANCER RES.

XX Van Der Bruggen P, Traversari C, Lurquin C, Boon T, De Plaen B;

PI Van Pel A, Chomez P, Van Den Eynde B;

XX WPI; 1999-418294/35.

XX New tumour rejection antigen is useful as a vaccine against cancerous  
 XX diseases.

XX Example 32; Col 21; 58pp; English.

XX This sequence represents a PCR primer for the MAGE gene exon3. The  
 CC invention relates to a tumour rejection antigen sequence that is useful  
 CC as a tumour rejection antigen for vaccination against cancerous  
 CC conditions

XX Sequence 17 BP; 6 A; 2 C; 9 G; 0 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 927 TTATCCCTCCTCTTC 942

||| |||||

DB 16 TTGGCCCTCCTCTTC 1

RESULT 255

AAA36536

ID AAA36536 standard; DNA; 17 BP.

XX AAA36536;

AC AAA36536;

XX 26-JUL-2000 (first entry)

XX Human genomic SNP allele specific oligonucleotide SEQ ID NO:601.

XX Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis;

XX allele specific oligonucleotide; ASO; reduced complexity genome; RCG;

XX genomic classification; identification; DNA fingerprinting;

XX tumour characterisation; hybridisation; ss.

XX Homo sapiens.

XX WO200018960-A2.

XX 06-APR-2000.

XX 24-SEP-1999; 99WO-US022283.

XX 25-SEP-1998; 98US-0101757P.

XX (MASI ) MASSACHUSETTS INST TECHNOLOGY.

XX Landers JE, Jordan B, Housman DE, Charest A;

XX WPI; 2000-293181/25.

XX Detection of single nucleotide polymorphisms in genomes by preparation  
 PT and analysis of reduced complexity genomes, useful for genotyping,  
 PT fingerprinting and determining allele frequency of SNPs.  
 XX Disclosure; Page 71; 111pp; English.

XX A method has been developed for detecting the presence or absence of a  
 CC single nucleotide polymorphism (SNP) allele in a genomic sample. The  
 CC method comprises preparing a reduced complexity genome (RCG) from the  
 CC genomic sample and analysing the RCG for the presence or absence of a SNP  
 CC allele. The method can be used to characterise a tumour, to generate a  
 CC genomic pattern for an individual genome or to generate a genomic  
 CC classification code for a genome. The method can be used to assess  
 CC whether a subject is at risk for developing a disease or to identify a  
 CC set of SNP alleles associated with a disease. The method can also be used  
 CC to perform linkage analysis. AAA35944 to AAA35947 represent sequences  
 CC used in the exemplification of the present invention. AAA35948 to  
 CC AAA36632 represent nucleotide sequences containing SNPs

XX Sequence 17 BP; 2 A; 6 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 922 TGCCTTTTATCCCTCC 937

||||| |||

DB 2 TGCCTTTTATCTGCC 17

RESULT 256

AAF04245

ID AAF04245 standard; DNA; 17 BP.

XX AAF04245;

XX 16-FEB-2001 (first entry)

XX Hammerhead ribozyme substrate #1761.

Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
interferon alpha; ss.

Homo sapiens.

WO200061729-A2.

19-OCT-2000.

11-APR-2000; 2000WO-US009721.

12-APR-1999; 99US-0129390P.

(RIBO-) RIBOZYME PHARM INC.

Blatt L, Zwick M, Pavco P, Mcswiggen J;

WPI; 2000-647423/62.

Enzymatic and antisense nucleic acid inhibition of repressor genes,  
useful for producing e.g. granulocyte colony stimulating factor protein,  
interferon alpha and erythropoietin.

Claim 4; Page 96; 164pp; English.

The present invention relates to enzymatic and antisense nucleic acid  
molecules that act as inhibitors of the expression of repressor genes  
encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
factor gene, IRF-2 and/or the CAAT Displacement Protein (CDP).  
Inhibition of the repressors removes prevents inhibition (and  
consequently increases expression of) genes involved in the production of  
erythropoietin, granulocyte colony stimulating factor protein and  
interferon alpha

Sequence 17 BP; 2 A; 2 C; 3 G; 10 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

911 TCTTTGGTCTTTGGCT 926

|||||  
1 TTTTGTATCTTTGGCT 16

SULT 257

F04693

AAF04693 standard; DNA; 17 BP.

AAF04693;

16-FEB-2001 (first entry)

Hammerhead ribozyme substrate #2209.

Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
interferon alpha; ss.

Homo sapiens.

WO200061729-A2.

19-OCT-2000.

11-APR-2000; 2000WO-US009721.

12-APR-1999; 99US-0129390P.

(RIBO-) RIBOZYME PHARM INC.

Blatt L, Zwick M, Pavco P, Mcswiggen J;

DR WPI; 2000-647423/62.

XX Enzymatic and antisense nucleic acid inhibition of repressor genes,  
PT useful for producing e.g. granulocyte colony stimulating factor protein,  
PT interferon alpha and erythropoietin.

XX PS Claim 4; Page 106; 164pp; English.

XX CC The present invention relates to enzymatic and antisense nucleic acid  
CC molecules that act as inhibitors of the expression of repressor genes  
CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
CC factor gene, IRF-2 and/or the CAAT Displacement Protein (CDP).  
CC Inhibition of the repressors removes prevents inhibition (and  
CC consequently increases expression of) genes involved in the production of  
CC erythropoietin, granulocyte colony stimulating factor protein and  
CC interferon alpha

XX SQ Sequence 17 BP; 2 A; 2 C; 3 G; 10 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 911 TCTTTGGTCTTTGGCT 926

|||||  
1 TTTTGTATCTTTGGCT 16

RESULT 258

AAH95137

ID AAH95137 standard; RNA; 17 BP.

AC AAH95137;

DT 09-OCT-2001 (first entry)

DE Human Chk1 ribozyme substrate SEQ ID NO: 562.

KW Human; checkpoint kinase-1; Chk1; antisense; ribozyme; gene therapy;  
KW RNA cleavage; cancer; ss.

XX Homo sapiens.

XX WO200157206-A2.

XX 09-AUG-2001.

XX 02-FEB-2001; 2001WO-US003504.

XX 03-FEB-2000; 2000US-0179983P.

XX (RIBO-) RIBOZYME PHARM INC.

XX (FATT) FATTAEY A R.

XX Fattaey AR, Jarvis T, Mcswiggen J, Booher RN, Holman PS;

XX WPI; 2001-496922/54.

XX Novel nucleic acid molecule e.g., ribozymes or antisense nucleic acid  
PT molecules, which downregulates expression of a checkpoint kinase-1 gene,  
PT useful for treating colorectal, lung, breast or prostate cancers.

XX Claim 4; Page 64; 115pp; English.

XX The present invention provides nucleic acid molecules capable of  
CC downregulating the expression of the human checkpoint kinase-1 (Chk1)  
CC gene. These may be antisense or ribozyme sequences, and are useful in the  
CC treatment of diseases associated with conditions affected by Chk1 levels,  
CC including cancer. The present sequence is an oligonucleotide described in  
CC the exemplification of the invention

XX SQ Sequence 17 BP; 3 A; 4 C; 2 G; 0 T; 8 U; 0 Other;



Claim 30; Page 144; 200pp; English.



29-MAY-2002 (first entry)  
Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7084.  
Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;  
muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
skeletal muscle disorder; amplicon; screening; ss.  
Homo sapiens.  
WO200192524-A2.  
06-DEC-2001.  
25-MAY-2001; 2001WO-US016981.  
26-MAY-2000; 2000US-0207456P.  
21-SEP-2000; 2000US-0234687P.  
27-SEP-2000; 2000US-0236359P.  
04-OCT-2000; 2000GB-00024263.  
30-JAN-2001; 2001WO-US000661.  
30-JAN-2001; 2001WO-US000662.  
30-JAN-2001; 2001WO-US000663.  
30-JAN-2001; 2001WO-US000664.  
30-JAN-2001; 2001WO-US000665.  
30-JAN-2001; 2001WO-US000666.  
30-JAN-2001; 2001WO-US000667.  
30-JAN-2001; 2001WO-US000668.  
30-JAN-2001; 2001WO-US000669.  
30-JAN-2001; 2001WO-US000670.  
05-FEB-2001; 2001US-0266860P.  
(AEOM-) AEOMICA INC.  
Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
WPI; 2002-179446/23.  
New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,  
or as specific biomolecule capture probes for surface-enhanced laser  
desorption ionization, comprises human myosin-like protein hGDMLP-1.  
Disclosure; SEQ ID NO 7084; 214pp; English.  
The present invention describes a human genome-derived myosin-like  
protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-  
1 can be used in gene therapy and vaccine production. The hGDMLP-1  
nucleic acids can be used as probes to detect, characterize and quantify  
hGDMLP-1 nucleic acids in samples, as amplification substrates, to  
provide initial substrates for the recombinant engineering of hGDMLP-1  
protein variants having desired phenotypic improvements, and for  
expressing the proteins. The hGDMLP-1 proteins or polypeptides may be  
used as immunogens to raise antibodies that specifically recognise hGDMLP  
-1 proteins, as standards in assays used to determine the concentration  
and/or amount specifically of hGDMLP proteins, as specific biomolecule  
capture probes for surface-enhanced laser desorption ionisation, as  
therapeutic supplement in patients having specific deficiency in hGDMLP-1  
production, and in vaccines or for replacement therapy. The  
polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a  
disorder associated with the expression of hGDMLP-1, in particular heart  
and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.  
The present sequence represents an oligomer used in the screening of the  
hGDMLP-1 sequence in the exemplification of the present invention. N.B.  
The sequence data for this patent did not form part of the printed  
specification, but was obtained in electronic format directly from WIPO  
at ftp.wipo.int/pub/published\_pct\_sequence  
Sequence 17 BP; 6 A; 3 C; 8 G; 0 T; 0 U; 0 Other;  
Query Match 15.3%; Score 11.2; DB 1; Length 17;  
Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 934 CTCCTCTTCATTGGTT 949  
Db 16 CTCCTCTCTCTGGCT 1  
RESULT 265  
ABV85535  
ID ABV85535 standard; DNA; 17 BP.  
XX  
AC ABV85535;  
XX  
DT 11-DEC-2002 (first entry)  
XX  
DE Human pp-GaNTase 10 scanning 17-mer SEQ ID NO:528.  
XX  
KW Human; UDP-GalNAC:polypeptide N-acetylgalactosaminyltransferase 10;  
KW pp-GaNTase 10; EC 2.4.1.41; chromosome 7q11.2; gene therapy; scanning;  
ss.  
OS Homo sapiens.  
OS Synthetic.  
XX  
PN EP1243660-A2.  
XX  
PD 25-SEP-2002.  
XX  
PF 25-JAN-2002; 2002EP-00001161.  
XX  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.  
PR 23-MAY-2001; 2001US-00864761.  
PR 30-AUG-2001; 2001US-0315984P.  
XX  
PA (AEOM-) AEOMICA INC.  
XX  
PI Zhang J, Gu Y, Nguyen C;  
XX  
DR WPI; 2002-724954/79.  
XX  
PT Nucleic acid encoding human UDP-GalNAC:polypeptide N-  
PT cetylalactosaminyltransferase 10 protein is useful to diagnose, prevent  
PT and treat disorders associated with reduced or over expression of the  
PT encoded protein.  
XX  
PS Example 2; SEQ ID NO 528; 59pp; English.  
XX  
CC The present invention describes an isolated nucleic acid (I) encoding a  
CC human UDP-GalNAC:polypeptide N-acetylgalactosaminyltransferase 10 (pp-  
CC GaNTase 10, EC 2.4.1.41) protein. Human pp-GaNTase 10 is located to  
CC chromosome 7q11.2. (I) can be used in gene therapy. Molecules of the  
CC present invention can be used in therapy, particularly to prevent or  
CC treat a disorder associated with decreased expression or activity of pp-  
CC GaNTase. The sequences given in ABV85011 to ABV86689 and ABP3502 to  
CC ABP3504 are given in the exemplification of the present invention. N.B.  
CC The sequence data for this patent is not represented in the printed  
CC specification but is based on sequence information supplied by the  
CC European Patent Office  
XX  
SQ Sequence 17 BP; 6 A; 4 C; 0 G; 7 T; 0 U; 0 Other;  
Query Match 15.3%; Score 11.2; DB 1; Length 17;  
Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 929 TATCCCTCTCTTCAT 944  
Db 2 TATCCATCATATCAT 17



Query Match 15.3%; Score 11.2; DB 1; Length 17;  
 Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
 Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

907 ATTTCCTTTGGTCTTT 922  
 | | | | | | | | | | | | | | | | | |  
 1 AGTTTCTATGGGCTTT 16

RESULT 268  
 3K25931/c  
 1 ABK25931 standard; DNA; 17 BP.  
 1 ABK25931;  
 09-APR-2002 (first entry)  
 Amino acid overproduction conferring genome altering oligonucleotide #3.

Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;  
 o-methyl modification; LNA modification; phosphorothioate linkage;  
 DNA repair; DNA alteration; environmental tolerance; hygromycin-B;  
 abiotic stress tolerance; improved nutritional value; hygromycin-B;  
 amino acid overproduction; herbicide resistance; glyphosate resistance;  
 imidazolinone herbicide resistance; herbicide resistance; triazine resistance;  
 porphyrin herbicide resistance; triazine resistance; disease resistance;  
 modified oil production; modified starch production; waxy starch;  
 altered floral morphology; male-sterile plant; albino mutant;  
 modified fatty acid content; reduced palmitate production; albino plant;  
 increased stearate production; reduced linolenic acid production;  
 photosynthetic process.  
 Arabidopsis thaliana.  
 Synthetic.  
 WO200192512-A2.  
 06-DEC-2001.  
 01-JUN-2001; 2001WO-US017672.  
 01-JUN-2000; 2000US-0208538P.  
 30-OCT-2000; 2000US-0244989P.  
 27-MAR-2001; 2001US-00818875.  
 (UYDE ) UNIV DELAWARE.  
 Kmiec EB, Gamper HB, Rice MC, Kim J;  
 WPI; 2002-106307/14.

New oligonucleotides with modified nuclease-resistant termini, useful for  
 creating plants with desired phenotypes, e.g. stress tolerance, improved  
 nutritional value, herbicide or disease resistance, or modified oil  
 production.  
 Claim 7; Page 122; 220pp; English.

The invention relates to an oligonucleotide for targeted alteration of a  
 genetic sequence, which comprises a single-stranded oligonucleotide  
 having a DNA domain. The DNA domain has at least one mismatch with  
 respect to the genetic sequence to be altered and further comprises  
 chemical modifications of the oligonucleotide. The chemical modifications  
 consist of o-methyl modification, an LNA modification, two or more  
 phosphorothioate linkages on a terminus, or a combination of any two or  
 more of these modifications. The oligonucleotides are useful for  
 directing repair or alteration of plant genetic information. The  
 oligonucleotides are particularly useful for creating plants with desired  
 phenotypes, e.g. environmental or abiotic stress tolerance, improved  
 nutritional value (e.g. altering amino acid content of plants or  
 conferring amino acid overproduction), herbicide resistance (e.g.  
 glyphosate resistance, imidazolinone and sulphonylurea herbicide  
 resistance, porphyrin herbicide resistance or triazine resistance),

CC disease resistance, modified oil production, modified starch production  
 (e.g. increased starch or production of waxy starch), altered floral  
 morphology (e.g. male-sterile plants) or modified fatty acid content  
 (e.g. reduced palmitate, increased stearate or reduced linolenic acid).  
 The oligonucleotides are also useful for producing albino mutants for the  
 analysis of photosynthetic processes. This sequence represents a genome  
 altering oligonucleotide of the invention

XX Sequence 17 BP; 8 A; 4 C; 2 G; 3 T; 0 U; 0 Other;  
 SQ

Query Match 15.3%; Score 11.2; DB 1; Length 17;  
 Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
 Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

907 ATTTCCTTTGGTCTTT 922  
 | | | | | | | | | | | | | | | | | |  
 17 AGTTTCTATGGGCTTT 2

RESULT 269  
 ABV82837  
 ID ABV82837 standard; DNA; 17 BP.  
 XX AC ABV82837;  
 XX DT 03-JAN-2003 (first entry)  
 DE Human HTPL scanning oligonucleotide SEQ ID 4083.  
 XX Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;  
 KW human testis expressed Patched like protein; testis; adrenal; liver;  
 KW male germ cell development; bone marrow; brain; kidney; lung; placenta;  
 KW prostate; skeletal muscle; colon; male infertility; cancer; ss.  
 XX OS Homo sapiens.  
 XX EP1229046-A2.  
 XX PD 07-AUG-2002.  
 XX PF 28-JAN-2002; 2002EP-00001167.  
 XX PR 30-JAN-2001; 2001WO-US000663.  
 PR 30-JAN-2001; 2001WO-US000664.  
 PR 30-JAN-2001; 2001WO-US000665.  
 PR 30-JAN-2001; 2001WO-US000667.  
 PR 30-JAN-2001; 2001WO-US000668.  
 PR 30-JAN-2001; 2001WO-US000669.  
 PR 23-MAY-2001; 2001US-00864761.  
 PR 09-OCT-2001; 2001US-0327898P.  
 XX (AEOM-) AEOMICA INC.  
 XX Zhan J;  
 XX WPI; 2002-676582/73.

Novel isolated human testis expressed Patched like protein (HTPL), useful  
 for identifying agonist and antagonist and specific binding partners, and  
 for treating subjects having defects in HTPL.  
 Example 2; Page 599; 718pp; English.

The present invention relates to human testis expressed Patched like  
 protein (HTPL, see ABV8759 to ABV8762 and ABV8759 to ABV8762). HTPL  
 has two isoforms, with a few single base pair differences between the  
 two. One of the single base pair changes introduces a premature stop  
 codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL  
 shares an overall structure organisation with the Patched protein. The  
 shared structural features strongly imply that HTPL plays a role similar  
 to that of Patched, and is a potential tumour suppressor. HTPL is  
 important in regulating male germ cell development, and the HTPL gene was  
 mapped to human chromosome 10p12.1. HTPL and its coding sequence are



CC useful for diagnosing a disorder caused by mutation in HTPL, and in  
 CC therapy and manufacture of a medicament for treatment or prevention of  
 CC such disorder associated with decreased expression or activity of human  
 CC HTPL. Such disorders include disorders of testis, or adrenal, adult and  
 CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,  
 CC skeletal muscle or colon function. HTPL proteins and nucleic acids are  
 CC clinically useful diagnostic markers and potential therapeutic agents for  
 CC male infertility and cancer. The present oligonucleotide was used in an  
 CC example from the invention  
 XX  
 SQ Sequence 17 BP; 2 A; 4 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;  
 Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
 Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 935 TCCCTCTTCATTGGTTT 950  
 ||||| ||||| |||||  
 Db 1 TCCATGCAATTGTTT 16

RESULT 270  
 ABV82836  
 ID ABV82836 standard; DNA; 17 BP.  
 AC ABV82836;

DT 03-JAN-2003 (first entry)

DE Human HTPL scanning oligonucleotide SEQ ID 4082.

XX Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;  
 KW human testis expressed Patched like protein; testis; adrenal; liver;  
 KW male germ cell development; bone marrow; brain; kidney; lung; placenta;  
 KW prostate; skeletal muscle; colon; male infertility; cancer; ss.

XX Homo sapiens.

XX EPI229046-A2.

PJ 07-AUG-2002.

XX 28-JAN-2002; 2002EP-00001167.

XX 30-JAN-2001; 2001WO-US000663.

PR 30-JAN-2001; 2001WO-US000664.

PR 30-JAN-2001; 2001WO-US000665.

PR 30-JAN-2001; 2001WO-US000667.

PR 30-JAN-2001; 2001WO-US000668.

PR 30-JAN-2001; 2001WO-US000669.

PR 23-MAY-2001; 2001US-00864761.

PR 09-OCT-2001; 2001US-0327898P.

XX (ABOM-) ABOMICA INC.

PA Zhan J;

PI WPI; 2002-676582/73.

XX Novel isolated human testis expressed Patched like protein (HTPL), useful  
 PT for identifying agonist and antagonist and specific binding partners, and  
 PT for treating subjects having defects in HTPL.

XX Example 2; Page 599; 718pp; English.

XX The present invention relates to human testis expressed Patched like  
 CC protein (HTPL, see ABV78759 to ABV78762 and ABV98519 to ABV98520). HTPL  
 CC has two isoforms, with a few single base pair differences between the  
 CC two. One of the single base pair changes introduces a premature stop  
 CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL  
 CC shares an overall structure organisation with the Patched protein. The  
 CC shared structural features strongly imply that HTPL plays a role similar  
 CC to that of Patched, and is a potential tumour suppressor. HTPL is

CC important in regulating male germ cell development, and the HTPL gene was  
 CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are  
 CC useful for diagnosing a disorder caused by mutation in HTPL, and in  
 CC therapy and manufacture of a medicament for treatment or prevention of  
 CC such disorder associated with decreased expression or activity of human  
 CC HTPL. Such disorders include disorders of testis, or adrenal, adult and  
 CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,  
 CC skeletal muscle or colon function. HTPL proteins and nucleic acids are  
 CC clinically useful diagnostic markers and potential therapeutic agents for  
 CC male infertility and cancer. The present oligonucleotide was used in an  
 CC example from the invention  
 XX

SQ Sequence 17 BP; 2 A; 3 C; 2 G; 10 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;  
 Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
 Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 935 TCCCTCTTCATTGGTTT 950  
 ||||| ||||| |||||  
 Db 2 TCCATGCAATTGTTT 17

RESULT 271  
 ABK18613/C  
 ID ABK18613 standard; RNA; 17 BP.  
 XX AC ABK18613;

DT 09-APR-2002 (first entry)

DE Human ERG G-cleaver ribozyme target sequence Seq ID No 1260.

XX Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
 KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
 KW vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
 KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
 KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
 KW angiofibroma of tuberosus sclerosis; port-wine stain; wound healing;  
 KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
 KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNazyme; inozyme;  
 KW amberzyme.

XX Homo sapiens.

XX WO200188124-A2.

XX 22-NOV-2001.

XX 16-MAY-2001; 2001WO-US015866.

XX 16-MAY-2000; 2000US-00572021.

XX (RIBO-) RIBOZYME PHARM INC.

XX (GLAX ) GLAXO GROUP LTD.

PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin P, Randi AM;

DR WPI; 2002-082995/11.

XX Novel polynucleotide which down regulates expression of Ets-related gene,  
 PT useful for treating cancer, diabetic retinopathy, macular degeneration,  
 PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.

XX Claim 4; Page 83; 149pp; English.

XX The invention relates to a nucleic acid molecule (I) which down regulates  
 CC expression of an Ets-related gene (ERG). (I) is useful for treating  
 CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
 CC tumour angiogenesis, diabetic retinopathy, macular degeneration,  
 CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
 CC vulgaris, angiofibroma of tuberosus sclerosis, port-wine stains, Sturge  
 CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu

sndrome, leukaemia, osteoporosis and wound healing. (I) is useful for treating a patient having a condition associated with the level of ERG, by contacting cells of the patient with (I) under conditions suitable for the treatment. The method comprises the use of one or more therapies under conditions suitable for the treatment. Leukaemia or tumour angiogenesis is treated by administering (I) to the patient in conjunction with one or more of other therapies such as radiation or chemotherapy treatment. (I) is useful for reducing ERG activity in a cell, by contacting the cell with (I). (I) is useful for cleaving RNA of ERG gene, by contacting (I) with RNA, in the presence of a divalent cation such as Mg<sup>2+</sup>. (I) is useful for diagnosis of conditions and diseases related to the expression of ERG, and as diagnostic tool to examine genetic drift and mutations within diseased cells or to detect the presence of ERG RNA in a cell. (I) is useful for specifically targeting genes that share homology with ERG gene or ERG fusion genes. ABK17354-ABK22719 represent nucleic acids, including antisense and enzymatic nucleic acid molecules which regulate expression of ERG, and related PCR primers of the invention

Sequence 17 BP; 10 A; 1 C; 5 G; 0 T; 1 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

925 CTTTATCCCTCTCT 940

||||| ||| |||||  
16 CTTTTCATCTCTCT 1

RESULT 272

ABK19015/c

ABK19015 standard; RNA; 17 BP.

ABK19015;

09-APR-2002 (first entry)

Human ERG DNAzyme target sequence Seq ID No 1662.

Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic; vulnery; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis; tumour angiogenesis; diabetic retinopathy; macular degeneration; neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris; angiofibroma of tuberous sclerosis; port-wine stain; wound healing; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss; Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme; amberzyme.

Homo sapiens.

WO200188124-A2.

22-NOV-2001.

16-MAY-2001; 2001WO-US015866.

16-MAY-2000; 2000US-00572021.

(RIBO-) RIBOZYME PHARM INC.  
(GLAX ) GLAXO GROUP LTD.

Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;

WPI; 2002-082995/11.

Novel polynucleotide which down regulates expression of Ets-related gene, useful for treating cancer, diabetic retinopathy, macular degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.

Claim 4; Page 106; 149pp; English.

The invention relates to a nucleic acid molecule (I) which down regulates expression of an Ets-related gene (ERG). (I) is useful for treating conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma, tumour angiogenesis, diabetic retinopathy, macular degeneration, neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for treating a patient having a condition associated with the level of ERG, by contacting cells of the patient with (I) under conditions suitable for the treatment. The method comprises the use of one or more therapies under conditions suitable for the treatment. Leukaemia or tumour angiogenesis is treated by administering (I) to the patient in conjunction with one or more of other therapies such as radiation or chemotherapy treatment. (I) is useful for reducing ERG activity in a cell, by contacting the cell with (I). (I) is useful for cleaving RNA of ERG gene, by contacting (I) with RNA, in the presence of a divalent cation such as Mg<sup>2+</sup>. (I) is useful for diagnosis of conditions and diseases related to the expression of ERG, and as diagnostic tool to examine genetic drift and mutations within diseased cells or to detect the presence of ERG RNA in a cell. (I) is useful for specifically targeting genes that share homology with ERG gene or ERG fusion genes. ABK17354-ABK22719 represent nucleic acids, including antisense and enzymatic nucleic acid molecules which regulate expression of ERG, and related PCR primers of the invention

Sequence 17 BP; 11 A; 1 C; 4 G; 0 T; 1 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 926 TTTTATCCCTCTCT 941

||||| ||| |||||  
Dd 17 TTTTTCATCTCTCT 2

RESULT 273

ABK18354/c

ID ABK18354 standard; RNA; 17 BP.

AC ABK18354;

09-APR-2002 (first entry)

Human ERG hammerhead ribozyme target sequence, Seq ID No 1001.

Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic; vulnery; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis; tumour angiogenesis; diabetic retinopathy; macular degeneration; neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris; angiofibroma of tuberous sclerosis; port-wine stain; wound healing; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss; Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme; amberzyme.

Homo sapiens.

WO200188124-A2.

22-NOV-2001.

16-MAY-2001; 2001WO-US015866.

16-MAY-2000; 2000US-00572021.

(RIBO-) RIBOZYME PHARM INC.  
(GLAX ) GLAXO GROUP LTD.

Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;

WPI; 2002-082995/11.

XX Novel polynucleotide which down regulates expression of Ets-related gene,  
PT useful for treating cancer, diabetic retinopathy, macular degeneration,  
PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
XX  
XX  
XX Claim 4; Page 77; 149pp; English.  
XX  
XX The invention relates to a nucleic acid molecule (I) which down regulates  
CC expression of an Ets-related gene (ERG). (I) is useful for treating  
CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
CC tumour angiogenesis, diabetic retinopathy, macular degeneration,  
CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
CC vulgaris, angiofibroma of tuberosus sclerosis, port-wine stains, Sturge  
CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
CC treating a patient having a condition associated with the level of ERG,  
CC by contacting cells of the patient with (I) under conditions suitable for  
CC the treatment. The method comprises the use of one or more therapies  
CC under conditions suitable for the treatment. Leukaemia or tumour  
CC angiogenesis is treated by administering (I) to the patient in  
CC conjunction with one or more of other therapies such as radiation or  
CC chemotherapy treatment. (I) is useful for reducing ERG activity in a  
CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
CC ERG gene, by contacting (I) with RNA, in the presence of a divalent  
CC cation such as Mg2+. (I) is useful for diagnosis of conditions and  
CC diseases related to the expression of ERG, and as diagnostic tool to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of ERG RNA in a cell. (I) is useful for specifically  
CC targeting genes that share homology with ERG gene or ERG fusion genes.  
CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
CC related PCR primers of the invention  
XX  
SQ Sequence 17 BP; 12 A; 2 C; 2 G; 0 T; 1 U; 0 Other;  
Query Match 15.3%; Score 11.2; DB 1; Length 17;  
Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 908 TTTTCTTTGTCCTTG 923  
Db 17 TTTTCTTCTGTTTG 2  
RESULT 274  
ABS75096/c  
ID ABS75096 standard; DNA; 17 BP.  
XX  
XX ABS75096;  
XX  
XX 24-DEC-2002 (first entry)  
XX Human PAPP-Ea associated 17-mer SEQ ID 622.  
XX  
XX PAPP-E; human; pregnancy associated plasma protein E; abortive;  
XX contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;  
XX dysgenetic pregnancy; primer; ss.  
XX Homo sapiens.  
XX  
XX US2002102252-A1.  
XX  
XX 01-AUG-2002.  
XX  
XX 06-APR-2001; 2001US-00827998.  
XX  
XX 26-MAY-2000; 2000US-0207456P.  
XX (GUYI/) GU Y.  
XX (SHAN/) SHANNON M E.  
XX Gu Y, Shannon ME;  
XX  
XX WPI; 2002-697817/75.  
XX  
XX New isolated nucleic acid encoding an isoform of human pregnancy  
XX associated plasma protein E, for preventing or aborting pregnancy.  
XX Example 2; Page 156; 353pp; English.  
XX  
XX This invention describes a novel isolated nucleic acid that encodes one  
XX of three new isoforms of human pregnancy associated plasma protein E,  
XX hPAPP-E. The products of the invention have abortive and contraceptive  
XX activity and can be used for gene therapy or in a vaccine. The nucleic  
XX acid, polypeptide encoded by it, or antibody to the polypeptide can be  
XX used in pharmaceutical compositions or vaccines for preventing or  
XX aborting pregnancy. PAPP-E is used in the antenatal diagnosis of  
XX dysgenetic pregnancies. The nucleic acids are used as probes to assess  
XX the level of PAPP-E isoform mRNA in chorionic villus samples, and the  
XX antibodies can be used to assess the expression levels of PAPP-E isoform  
XX proteins in chorionic villus samples, to diagnose dysgenetic pregnancies  
XX antenatally. This sequence represents an oligomer used in scanning the  
XX human PAPP-E genes described in the disclosure of the invention  
XX  
SQ Sequence 17 BP; 6 A; 4 C; 6 G; 1 T; 0 U; 0 Other;  
Query Match 15.3%; Score 11.2; DB 1; Length 17;  
Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 922 TGCCTTTTATCCCTCC 937  
Db 16 TGGCTTCTATGCTCC 1

DR WPI; 2002-697817/75.  
XX  
XX New isolated nucleic acid encoding an isoform of human pregnancy  
XX associated plasma protein E, for preventing or aborting pregnancy.  
XX Example 2; Page 157; 353pp; English.  
XX  
XX This invention describes a novel isolated nucleic acid that encodes one  
XX of three new isoforms of human pregnancy associated plasma protein E,  
XX hPAPP-E. The products of the invention have abortive and contraceptive  
XX activity and can be used for gene therapy or in a vaccine. The nucleic  
XX acid, polypeptide encoded by it, or antibody to the polypeptide can be  
XX used in pharmaceutical compositions or vaccines for preventing or  
XX aborting pregnancy. PAPP-E is used in the antenatal diagnosis of  
XX dysgenetic pregnancies. The nucleic acids are used as probes to assess  
XX the level of PAPP-E isoform mRNA in chorionic villus samples, and the  
XX antibodies can be used to assess the expression levels of PAPP-E isoform  
XX proteins in chorionic villus samples, to diagnose dysgenetic pregnancies  
XX antenatally. This sequence represents an oligomer used in scanning the  
XX human PAPP-E genes described in the disclosure of the invention  
XX  
SQ Sequence 17 BP; 6 A; 4 C; 6 G; 1 T; 0 U; 0 Other;  
Query Match 15.3%; Score 11.2; DB 1; Length 17;  
Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 922 TGCCTTTTATCCCTCC 937  
Db 16 TGGCTTCTATGCTCC 1  
RESULT 275  
ABS75095/c  
ID ABS75095 standard; DNA; 17 BP.  
XX  
XX ABS75095;  
XX  
XX 24-DEC-2002 (first entry)  
XX Human PAPP-Ea associated 17-mer SEQ ID 621.  
XX  
XX PAPP-E; human; pregnancy associated plasma protein E; abortive;  
XX contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;  
XX dysgenetic pregnancy; primer; ss.  
XX Homo sapiens.  
XX  
XX US2002102252-A1.  
XX  
XX 01-AUG-2002.  
XX  
XX 06-APR-2001; 2001US-00827998.  
XX  
XX 26-MAY-2000; 2000US-0207456P.  
XX (GUYI/) GU Y.  
XX (SHAN/) SHANNON M E.  
XX Gu Y, Shannon ME;  
XX  
XX WPI; 2002-697817/75.  
XX  
XX New isolated nucleic acid encoding an isoform of human pregnancy  
XX associated plasma protein E, for preventing or aborting pregnancy.  
XX Example 2; Page 156; 353pp; English.  
XX  
XX This invention describes a novel isolated nucleic acid that encodes one  
XX of three new isoforms of human pregnancy associated plasma protein E,  
XX hPAPP-E. The products of the invention have abortive and contraceptive  
XX activity and can be used for gene therapy or in a vaccine. The nucleic  
XX acid, polypeptide encoded by it, or antibody to the polypeptide can be

used in pharmaceutical compositions or vaccines for preventing or aborting pregnancy. PAPP-E is used in the antenatal diagnosis of dysgenetic pregnancies. The nucleic acids are used as probes to assess the level of PAPP-E isoform mRNA in chorionic villus samples, and the antibodies can be used to assess the expression levels of PAPP-E isoform proteins in chorionic villus samples, to diagnose dysgenetic pregnancies antenatally. This sequence represents an oligomer used in scanning the human PAPP-E genes described in the disclosure of the invention

Sequence 17 BP; 6 A; 3 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

922 TGCCTTTATCCCTCC 937

|||||

17 TGGCTTCTATGCTCC 2

RESULT 276

ABK56283/c

ABK56283 standard; RNA; 17 BP.

ABK56283;

02-JUL-2002 (first entry)

Human CLCA1 gene enzymatic nucleic acid #654.

Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic; antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma; chronic bronchitis; cystic fibrosis; obstructive bowel syndrome; oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic; acetylcysteine.

Homo sapiens.

WO200211674-A2.

14-FEB-2002.

09-AUG-2001; 2001WO-US024970.

09-AUG-2000; 2000US-0224383P.

(RIBO-) RIBOZYME PHARM INC.

(SYNT) SYNTEX USA LLC.

(THOM/) THOMPSON J.

Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE; Grupe A;

WPI; 2002-217145/27.

Enzymatic polynucleotide that down regulates expression of chloride channel calcium activated gene, useful for treating Chronic obstructive pulmonary disease (COPD), chronic bronchitis and asthma.

Claim 4; Page 66; 152pp; English.

The invention relates to enzymatic nucleic acid molecules that down regulate expression of chloride channel calcium activated 1 (CLCA1) genes by cleaving RNA derived from the genes. The nucleic acid sequences are useful as pharmaceutical agents for treating conditions such as chronic obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic fibrosis, obstructive bowel syndrome and any other diseases or conditions that are related to or will respond to the levels of CLCA1 in a cell or tissue. The sequences are useful for reducing CLCA1 activity in a cell, hence, are useful for treatment of a patient having a condition associated with the level of CLCA1, where the invention further comprises the use of one or more therapies under conditions suitable for the treatment, for example, oxygen therapy, bronchodilators, corticosteroids,

CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The nucleic acids of the invention are also used as diagnostic tools to examine genetic drift and mutations within diseased cells or to detect the presence of CLCA1 RNA in a cell. This sequence represents an enzymatic nucleic acid molecule of the invention

SQ Sequence 17 BP; 9 A; 3 C; 2 G; 0 T; 3 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 939 CTTTCATTGGTTTAATG 954

|||||

16 CTTTATTTGTTGAATG 1

RESULT 277

ABK56418

ID ABK56418 standard; RNA; 17 BP.

XX

AC ABK56418;

XX

DT 02-JUL-2002 (first entry)

XX

DE Human CLCA1 gene enzymatic nucleic acid #789.

XX

KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic; antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma; chronic bronchitis; cystic fibrosis; obstructive bowel syndrome; oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic; acetylcysteine.

XX

OS Homo sapiens.

XX

WO200211674-A2.

14-FEB-2002.

09-AUG-2001; 2001WO-US024970.

09-AUG-2000; 2000US-0224383P.

(RIBO-) RIBOZYME PHARM INC.

(SYNT) SYNTEX USA LLC.

(THOM/) THOMPSON J.

Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;

Grupe A;

WPI; 2002-217145/27.

Enzymatic polynucleotide that down regulates expression of chloride channel calcium activated gene, useful for treating Chronic obstructive pulmonary disease (COPD), chronic bronchitis and asthma.

Claim 4; Page 70; 152pp; English.

The invention relates to enzymatic nucleic acid molecules that down regulate expression of chloride channel calcium activated 1 (CLCA1) genes by cleaving RNA derived from the genes. The nucleic acid sequences are useful as pharmaceutical agents for treating conditions such as chronic obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic fibrosis, obstructive bowel syndrome and any other diseases or conditions that are related to or will respond to the levels of CLCA1 in a cell or tissue. The sequences are useful for reducing CLCA1 activity in a cell, hence, are useful for treatment of a patient having a condition associated with the level of CLCA1, where the invention further comprises the use of one or more therapies under conditions suitable for the treatment, for example, oxygen therapy, bronchodilators, corticosteroids, antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The nucleic acids of the invention are also used as diagnostic tools to examine genetic drift and mutations within diseased cells or to detect

CC the presence of CLCA1 RNA in a cell. This sequence represents an  
CC enzymatic nucleic acid molecule of the invention  
XX  
SQ Sequence 17 BP; 4 A; 7 C; 0 G; 0 T; 6 U; 0 Other;  
Query Match 15.3%; Score 11.2; DB 1; Length 17;  
Best Local Similarity 50.0%; Pred. No. 7.9e+02;  
Matches 8; Conservative 5; Mismatches 3; Indels 0; Gaps 0;  
QY 930 ATCCCTCTCTTCATT 945  
:|||||: :|||:  
Db 2 AUCCACCUUCUCAU 17

RESULT 278  
ABK55849  
ID ABK55849 standard; RNA; 17 BP.  
XX  
AC ABK55849;  
XX  
DT 02-JUL-2002 (first entry)  
XX  
DE Human CLCA1 gene enzymatic nucleic acid #220.  
XX  
KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;  
KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;  
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome; mucokinetic;  
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;  
KW acetylcysteine.  
XX  
OS Homo sapiens.  
XX  
EN WO200211674-A2.  
XX  
PD 14-FEB-2002.  
XX  
PF 09-AUG-2001; 2001WO-US024970.  
XX  
PR 09-AUG-2000; 2000US-0224383P.  
XX  
FA (RIBO-) RIBOZYME PHARM INC.  
FA (SYNT ) SYNTEX USA LLC.  
FA (THOM/) THOMPSON J.  
XX  
PI Thompson J, Mcswiggen J, Mckenzie T, Ayers D, Szymkowski DE;  
PI Grupe A;  
XX  
WPI; 2002-217145/27.  
XX  
PT Enzymatic polynucleotide that down regulates expression of chloride  
PT channel calcium activated gene, useful for treating Chronic obstructive  
PT pulmonary disease (COPD), chronic bronchitis and asthma.  
XX  
FS Claim 4; Page 56; 152pp; English.  
XX  
CC The invention relates to enzymatic nucleic acid molecules that down  
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes  
CC by cleaving RNA derived from the genes. The nucleic acid sequences are  
CC useful as pharmaceutical agents for treating conditions such as chronic  
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic  
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions  
CC that are related to or will respond to the levels of CLCA1 in a cell or  
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,  
CC hence, are useful for treatment of a patient having a condition  
CC associated with the level of CLCA1, where the invention further comprises  
CC the use of one or more therapies under conditions suitable for the  
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,  
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The  
CC nucleic acids of the invention are also used as diagnostic tools to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of CLCA1 RNA in a cell. This sequence represents an  
CC enzymatic nucleic acid molecule of the invention  
XX

SQ Sequence 17 BP; 2 A; 8 C; 1 G; 0 T; 6 U; 0 Other;  
Query Match 15.3%; Score 11.2; DB 1; Length 17;  
Best Local Similarity 50.0%; Pred. No. 7.9e+02;  
Matches 8; Conservative 5; Mismatches 3; Indels 0; Gaps 0;  
QY 931 TCCCTCTCTTCATTG 946  
:|||||: :|||:  
Db 1 UCCACCUUCUCAU 16

RESULT 279  
ACC52807  
ID ACC52807 standard; DNA; 17 BP.  
XX  
AC ACC52807;  
XX  
DT 27-JUN-2003 (first entry)  
XX  
DE Human tumour suppressor sequence #1574.  
XX  
KW ss; tumour suppressor; antitumour; cytostatic; tumour suppression;  
KW tumour regression; apoptosis; virus resistance; diagnosis;  
KW cellular degeneration.  
XX  
OS Homo sapiens.  
XX  
EN FR2826373-A1.  
XX  
PD 27-DEC-2002.  
XX  
PF 20-JUN-2001; 2001FR-00008139.  
XX  
PR 20-JUN-2001; 2001FR-00008139.  
XX  
FA (MOLE-) MOLECULAR ENGINES LAB SA.  
XX  
PI Tuijnder M, Telerman A, Amson R;  
XX  
DR WPI; 2003-250498/25.  
XX  
PT New nucleic acid sequences associated with tumor suppression, regression,  
PT apoptosis or virus resistance are useful to diagnose and treat viral  
PT disease, development of tumor cells and cell degeneration.  
XX  
FS Claim 1; Page 404; 798pp; French.  
XX  
CC This sequence represents an isolated nucleic acid sequence associated  
CC with tumour suppression or regression, apoptosis or virus resistance. The  
CC invention relates to these sequences or sequences having at least 80%  
CC identity to them, and polypeptides encoded by the sequences or  
CC polypeptides having 80% identity to the polypeptide sequences. The  
CC invention is used to diagnose or treat viral disease or disease  
CC characterized by development of tumour cells or cellular degeneration  
XX  
SQ Sequence 17 BP; 4 A; 6 C; 1 G; 6 T; 0 U; 0 Other;  
Query Match 15.3%; Score 11.2; DB 1; Length 17;  
Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 930 ATCCCTCTCTTCATT 945  
:|||||: :|||:  
Db 2 ATCCCTCTCTTACAAT 17

RESULT 280  
ACC52527/c  
ID ACC52527 standard; DNA; 17 BP.  
XX  
AC ACC52527;  
XX  
DT 27-JUN-2003 (first entry)



```
XX SQ Sequence 17 BP; 4 A; 5 C; 1 G; 7 T; 0 U; 0 Other;
Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 930 ATCCCTCTCTTCATT 945
| | | | | | | | | |
DQ 2 ATCCCTCTCTTAAAT 17

RESULT 283
ABT36991/c
ID ABT36991 standard; DNA; 17 BP.
XX AC ABT36991;
XX DT 12-JUN-2003 (first entry)
XX DE Tumour suppression related human fukutin oligo SEQ ID No 2628.
XX KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
XX KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
XX KW schizophrenia; protein chip; gene therapy; tumour suppression;
XX KW human fukutin; ds.
XX OS Homo sapiens.
XX FN WO2003025175-A2.
XX PV 27-MAR-2003.
XX PD 17-SEP-2002; 2002WO-IB004208.
XX PF 17-SEP-2001; 2001FR-00011978.
XX PR 17-SEP-2001; 2001FR-00011978.
XX PA (MOLE-) MOLECULAR ENGINES LAB.
XX PI Telerman A, Amson R, Tuijnder M;
XX PI WPI; 2003-313353/30.
XX DR New isolated nucleic acid, useful for treating viral diseases associated
XX PT with tumors and cell degeneration, also related polypeptides, antibodies
XX PT and transfected cells.
XX FS Disclosure; Page 340; 720pp; French.
XX CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
XX CC given in the specification, a sequence containing at least 15 consecutive
XX CC nucleotides from the 17 mer sequence, a sequence with, after optimal
XX CC alignment, at least 80 % identity to the 17 mer sequence, or the complement
XX CC hybridizes to them under highly stringent conditions, or the complement
XX CC of any of them, or the corresponding RNA. The novel isolated nucleic
XX CC acid, of any of them, or the corresponding RNA. The novel isolated nucleic
XX CC acids of the invention are useful as probes and primers for detecting,
XX CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
XX CC component of a gene chip, in vitro as (anti)sense reagents, and for
XX CC production of recombinant polypeptides. Any of the nucleic acids,
XX CC polypeptides, vectors containing the nucleic acids, cells containing the
XX CC vector or antibodies directed against the polypeptides are useful for
XX CC preparation of pharmaceuticals for prevention and/or treatment of viral
XX CC diseases that are characterised by development of tumours or cell
XX CC degeneration, specifically cancer but also Alzheimer's disease and
XX CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
XX CC patient samples is useful for diagnosis and/or prognosis of these
XX CC diseases. The polypeptides can also be used to generate antibodies, and
XX CC both the polypeptide and antibodies are useful as components of protein
XX CC chips. The nucleic acid sequences of the invention can be used in gene
XX CC therapy. This polynucleotide sequence represents a tumour suppression
XX CC related human fukutin oligonucleotide of the invention
XX SQ Sequence 17 BP; 6 A; 2 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 933 CCTCCTCTTCATTGGT 948
| | | | | | | | | |
DQ 17 CATCCCTCTGCATTGAT 2

RESULT 284
ABT38451
ID ABT38451 standard; DNA; 17 BP.
XX AC ABT38451;
XX DT 12-JUN-2003 (first entry)
XX DE Tumour suppression related human fukutin oligo SEQ ID No 4088.
XX KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
XX KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
XX KW schizophrenia; protein chip; gene therapy; tumour suppression;
XX KW human fukutin; ds.
XX OS Homo sapiens.
XX FN WO2003025175-A2.
XX PV 27-MAR-2003.
XX PD 17-SEP-2002; 2002WO-IB004208.
XX PF 17-SEP-2001; 2001FR-00011978.
XX PR 17-SEP-2001; 2001FR-00011978.
XX PA (MOLE-) MOLECULAR ENGINES LAB.
XX PI Telerman A, Amson R, Tuijnder M;
XX PI WPI; 2003-313353/30.
XX DR New isolated nucleic acid, useful for treating viral diseases associated
XX PT with tumors and cell degeneration, also related polypeptides, antibodies
XX PT and transfected cells.
XX FS Disclosure; Page 511; 720pp; French.
XX CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
XX CC given in the specification, a sequence containing at least 15 consecutive
XX CC nucleotides from the 17 mer sequence, a sequence with, after optimal
XX CC alignment, at least 80 % identity to the 17 mer sequence, or the complement
XX CC hybridizes to them under highly stringent conditions, or the complement
XX CC of any of them, or the corresponding RNA. The novel isolated nucleic
XX CC acid, of any of them, or the corresponding RNA. The novel isolated nucleic
XX CC acids of the invention are useful as probes and primers for detecting,
XX CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
XX CC component of a gene chip, in vitro as (anti)sense reagents, and for
XX CC production of recombinant polypeptides. Any of the nucleic acids,
XX CC polypeptides, vectors containing the nucleic acids, cells containing the
XX CC vector or antibodies directed against the polypeptides are useful for
XX CC preparation of pharmaceuticals for prevention and/or treatment of viral
XX CC diseases that are characterised by development of tumours or cell
XX CC degeneration, specifically cancer but also Alzheimer's disease and
XX CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
XX CC patient samples is useful for diagnosis and/or prognosis of these
XX CC diseases. The polypeptides can also be used to generate antibodies, and
XX CC both the polypeptide and antibodies are useful as components of protein
XX CC chips. The nucleic acid sequences of the invention can be used in gene
XX CC therapy. This polynucleotide sequence represents a tumour suppression
XX CC related human fukutin oligonucleotide of the invention
XX SQ Sequence 17 BP; 1 A; 3 C; 4 G; 9 T; 0 U; 0 Other;
```

```
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

/ 916 GGCCTTTCCTTTTAT 931
| | | | | | | | | |
) 1 GATCTGCTTTTGT 16

RESULT 285
BT38397
) ABT38397 standard; DNA; 17 BP.
(
( ABT38397;
(
( 12-JUN-2003 (first entry)
(
( Tumour suppression related human fukutin oligo SEQ ID No 4034.
(
( Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
( antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
( schizophrenia; protein chip; gene therapy; tumour suppression;
( human fukutin; ds.
(
( Homo sapiens.
(
( WO2003025175-A2.
(
( 27-MAR-2003.
(
( 17-SEP-2002; 2002WO-IB004208.
(
( 17-SEP-2001; 2001PR-00011978.
(
( (MOLE-) MOLECULAR ENGINES LAB.
(
( Telerman A, Amson R, Tuijnder M;
(
( WPI; 2003-313353/30.
(
( New isolated nucleic acid, useful for treating viral diseases associated
( with tumors and cell degeneration, also related polypeptides, antibodies
( and transfected cells.
(
( Disclosure; Page 505; 720pp; French.
(
( The invention relates to a novel isolated 17 mer nucleic acid sequence.
( given in the specification, a sequence containing at least 15 consecutive
( nucleotides from the 17 mer sequence, a sequence with, after optimal
( alignment, at least 80 % identity to the 17 mer sequence, a sequence that
( hybridizes to them under highly stringent conditions, or the complement
( of any of them, or the corresponding RNA. The novel isolated nucleic
( acids of the invention are useful as probes and primers for detecting,
( identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
( component of a gene chip, in vitro as (anti)sense reagents, and for
( production of recombinant polypeptides. Any of the nucleic acids,
( polypeptides, vectors containing the nucleic acids, cells containing the
( vector or antibodies directed against the polypeptides are useful for
( preparation of pharmaceuticals for prevention and/or treatment of viral
( diseases that are characterised by development of tumours or cell
( degeneration, specifically cancer but also Alzheimer's disease and
( schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
( patient samples is useful for diagnosis and/or prognosis of these
( diseases. The polypeptides can also be used to generate antibodies, and
( both the polypeptide and antibodies are useful as components of protein
( chips. The nucleic acid sequences of the invention can be used in gene
( therapy. This polynucleotide sequence represents a tumour suppression
( related human fukutin oligonucleotide of the invention
(
( Sequence 17 BP; 4 A; 7 C; 2 G; 4 T; 0 U; 0 Other;
(
( Query Match 15.3%; Score 11.2; DB 1; Length 17;
( Best Local Similarity 81.2%; Pred. No. 7.9e+02;
( Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

/ 930 ATCCCTCCTTCATT 945
| | | | | | | | | |
) 2 ATCCACCACTGCATT 17

RESULT 286
ABT34837
ID ABT34837 standard; DNA; 17 BP.
XX
AC ABT34837;
XX
XX 12-JUN-2003 (first entry)
XX
XX Tumour suppression related human fukutin oligo SEQ ID No 474.
XX
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
XX antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
XX schizophrenia; protein chip; gene therapy; tumour suppression;
XX human fukutin; ds.
XX
XX Homo sapiens.
XX
XX WO2003025175-A2.
XX
XX 27-MAR-2003.
XX
XX 17-SEP-2002; 2002WO-IB004208.
XX
XX 17-SEP-2001; 2001PR-00011978.
XX
XX (MOLE-) MOLECULAR ENGINES LAB.
XX
XX Telerman A, Amson R, Tuijnder M;
XX
XX WPI; 2003-313353/30.
XX
XX New isolated nucleic acid, useful for treating viral diseases associated
XX with tumors and cell degeneration, also related polypeptides, antibodies
XX and transfected cells.
XX
XX Disclosure; Page 89; 720pp; French.
XX
XX The invention relates to a novel isolated 17 mer nucleic acid sequence.
XX given in the specification, a sequence containing at least 15 consecutive
XX nucleotides from the 17 mer sequence, a sequence with, after optimal
XX alignment, at least 80 % identity to the 17 mer sequence, a sequence that
XX hybridizes to them under highly stringent conditions, or the complement
XX of any of them, or the corresponding RNA. The novel isolated nucleic
XX acids of the invention are useful as probes and primers for detecting,
XX identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
XX component of a gene chip, in vitro as (anti)sense reagents, and for
XX production of recombinant polypeptides. Any of the nucleic acids,
XX polypeptides, vectors containing the nucleic acids, cells containing the
XX vector or antibodies directed against the polypeptides are useful for
XX preparation of pharmaceuticals for prevention and/or treatment of viral
XX diseases that are characterised by development of tumours or cell
XX degeneration, specifically cancer but also Alzheimer's disease and
XX schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
XX patient samples is useful for diagnosis and/or prognosis of these
XX diseases. The polypeptides can also be used to generate antibodies, and
XX both the polypeptide and antibodies are useful as components of protein
XX chips. The nucleic acid sequences of the invention can be used in gene
XX therapy. This polynucleotide sequence represents a tumour suppression
XX related human fukutin oligonucleotide of the invention
XX
XX Sequence 17 BP; 3 A; 6 C; 3 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 15.3%; Score 11.2; DB 1; Length 17;
XX Best Local Similarity 81.2%; Pred. No. 7.9e+02;
XX Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```



```
Db          ||| | ||| ||| |||
2 ATACGCTCTGCATT 17

RESULT 287
ABT36373/c
ID   ABT36373 standard; DNA; 17 BP.
XX
XX
AC   ABT36373;
XX
DT   12-JUN-2003 (first entry)
XX
DE   Tumour suppression related human fukutin oligo SEQ ID No 2010.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW   antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; protein chip; gene therapy; tumour suppression;
KW   human fukutin; ds.
XX
OS   Homo sapiens.
XX
PN   WO2003025175-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB004208.
XX
PR   17-SEP-2001; 2001FR-00011978.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A, Amson R, Tuijnder M;
XX
DR   WPI; 2003-313353/30.
XX
PT   New isolated nucleic acid, useful for treating viral diseases associated
PT   with tumors and cell degeneration, also related polypeptides, antibodies
PT   and transfected cells.
XX
PS   Disclosure; Page 268; 720pp; French.
XX
CC   The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC   given in the specification, a sequence containing at least 15 consecutive
CC   nucleotides from the 17 mer sequence, a sequence with, after optimal
CC   alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC   hybridizes to them under highly stringent conditions, or the complement
CC   of any of them, or the corresponding RNA. The novel isolated nucleic
CC   acids of the invention are useful as probes and primers for detecting,
CC   identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC   component of a gene chip, in vitro as (anti)sense reagents, and for
CC   production of recombinant polypeptides. Any of the nucleic acids,
CC   polypeptides, vectors containing the nucleic acids, cells containing the
CC   vector or antibodies directed against the polypeptides are useful for
CC   preparation of pharmaceuticals for prevention and/or treatment of viral
CC   diseases that are characterised by development of tumours or cell
CC   degeneration, specifically cancer but also Alzheimer's disease and
CC   schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC   patient samples is useful for diagnosis and/or prognosis of these
CC   diseases. The polypeptides can also be used to generate antibodies, and
CC   both the polypeptide and antibodies are useful as components of protein
CC   chips. The nucleic acid sequences of the invention can be used in gene
CC   therapy. This polynucleotide sequence represents a tumour suppression
CC   related human fukutin oligonucleotide of the invention
XX
SQ   Sequence 17 BP; 6 A; 3 C; 2 G; 6 T; 0 U; 0 Other;
Query Match      15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Cy          943 ATTGGTTTAATGTATC 958
          ||| | ||| ||| |||
16 ATTGGCTTAATAGATC 1

Db          ||| | ||| ||| |||
16 ATTGGCTTAATAGATC 1
```



AC ABT38298;  
 DT 12-JUN-2003 (first entry)  
 DE Tumour suppression related human fukutin oligo SEQ ID No 3935.  
 XX  
 CC Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;  
 DE antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;  
 KW schizophrénia; protein chip; gene therapy; tumour suppression;  
 KW human fukutin; ds.  
 XX Homo sapiens.  
 OS  
 OS WO2003025175-A2.  
 DE 27-MAR-2003.  
 XX  
 DE 17-SEP-2002; 2002WO-IB004208.  
 FF  
 FF 17-SEP-2001; 2001FR-00011978.  
 XX  
 XX (MOLE-) MOLECULAR ENGINES LAB.  
 PA  
 XX Telerman A, Amson R, Tuijnder M;  
 PI WPI; 2003-313353/30.  
 XX  
 DR New isolated nucleic acid, useful for treating viral diseases associated  
 XX with tumors and cell degeneration, also related polypeptides, antibodies  
 PT and transfected cells.  
 PT  
 XX Disclosure; Page 494; 720pp; French.  
 PS  
 XX The invention relates to a novel isolated 17 mer nucleic acid sequence,  
 CC given in the specification, a sequence containing at least 15 consecutive  
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal  
 CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that  
 CC hybridizes to them under highly stringent conditions, or the complement  
 CC of any of them, or the corresponding RNA. The novel isolated nucleic  
 CC acids of the invention are useful as probes and primers for detecting,  
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one  
 CC component of a gene chip, in vitro as (anti)sense reagents, and for  
 CC production of recombinant polypeptides. Any of the nucleic acids,  
 CC polypeptides, vectors containing the nucleic acids, cells containing the  
 CC vector or antibodies directed against the nucleic acids, cells containing the  
 CC preparation of pharmaceuticals for prevention and/or treatment of viral  
 CC diseases that are characterised by development of tumours or cell  
 CC degeneration, specifically cancer but also Alzheimer's disease and  
 CC schizophrénia. Analysis of the expression of the 17 mer nucleic acids in  
 CC patient samples is useful for diagnosis and/or prognosis of these  
 CC diseases. The polypeptides can also be used to generate antibodies, and  
 CC both the polypeptide and antibodies are useful as components of protein  
 CC chips. The nucleic acid sequences of the invention can be used in gene  
 CC therapy. This polynucleotide sequence represents a tumour suppression  
 CC related human fukutin oligonucleotide of the invention  
 XX  
 SQ Sequence 17 BP; 2 A; 1 C; 4 G; 10 T; 0 U; 0 Other;  
 Query Match 15.3%; Score 11.2; DB 1; Length 17;  
 Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
 Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 903 GGTCATTTTCTTTGGT 918  
 | ||||| |||||  
 Db 1 GATCATTTTGTGTGT 16  
 RESULT 292  
 ABT40206  
 ID ABT40206 standard; DNA; 17 BP.  
 XX  
 AC ABT40206;  
 XX

DT 13-JUN-2003 (first entry)  
 XX  
 DE Tumour suppression related human fukutin oligo SEQ ID No 5843.  
 XX  
 CC Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;  
 DE antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;  
 KW schizophrénia; protein chip; gene therapy; tumour suppression;  
 KW human fukutin; ds.  
 XX Homo sapiens.  
 OS  
 OS WO2003025175-A2.  
 DE 27-MAR-2003.  
 XX  
 DE 17-SEP-2002; 2002WO-IB004208.  
 FF  
 FF 17-SEP-2001; 2001FR-00011978.  
 XX  
 XX (MOLE-) MOLECULAR ENGINES LAB.  
 PA  
 XX Telerman A, Amson R, Tuijnder M;  
 PI WPI; 2003-313353/30.  
 XX  
 DR New isolated nucleic acid, useful for treating viral diseases associated  
 XX with tumors and cell degeneration, also related polypeptides, antibodies  
 PT and transfected cells.  
 PT  
 XX Disclosure; Page 717; 720pp; French.  
 PS  
 XX The invention relates to a novel isolated 17 mer nucleic acid sequence,  
 CC given in the specification, a sequence containing at least 15 consecutive  
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal  
 CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that  
 CC hybridizes to them under highly stringent conditions, or the complement  
 CC of any of them, or the corresponding RNA. The novel isolated nucleic  
 CC acids of the invention are useful as probes and primers for detecting,  
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one  
 CC component of a gene chip, in vitro as (anti)sense reagents, and for  
 CC production of recombinant polypeptides. Any of the nucleic acids,  
 CC polypeptides, vectors containing the nucleic acids, cells containing the  
 CC vector or antibodies directed against the polypeptides are useful for  
 CC preparation of pharmaceuticals for prevention and/or treatment of viral  
 CC diseases that are characterised by development of tumours or cell  
 CC degeneration, specifically cancer but also Alzheimer's disease and  
 CC schizophrénia. Analysis of the expression of the 17 mer nucleic acids in  
 CC patient samples is useful for diagnosis and/or prognosis of these  
 CC diseases. The polypeptides can also be used to generate antibodies, and  
 CC both the polypeptide and antibodies are useful as components of protein  
 CC chips. The nucleic acid sequences of the invention can be used in gene  
 CC therapy. This polynucleotide sequence represents a tumour suppression  
 CC related human fukutin oligonucleotide of the invention  
 XX  
 SQ Sequence 17 BP; 1 A; 2 C; 3 G; 11 T; 0 U; 0 Other;  
 Query Match 15.3%; Score 11.2; DB 1; Length 17;  
 Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
 Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 916 GGCTTTTGCCTTTTAT 931  
 | ||||| |||||  
 Db 1 GATCTTTGTCTTTGT 16  
 RESULT 293  
 ABT39920  
 ID ABT39920 standard; DNA; 17 BP.  
 XX  
 AC ABT39920;  
 XX  
 DT 13-JUN-2003 (first entry)  
 XX

Tumour suppression related human fukutin oligo SEQ ID No 5557.

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.

Homo sapiens.

WO2003025175-A2.

27-MAR-2003.

17-SEP-2002; 2002WO-IB004208.

17-SEP-2001; 2001FR-00011978.

(MOLE-) MOLECULAR ENGINES LAB.

Telerman A, Amson R, Tuijnder M;

WPI; 2003-313353/30.

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

Disclosure; Page 683; 720pp; French.

The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention

Sequence 17 BP; 2 A; 4 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;  
Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

930 ATCCCTCTCTTCATT 945  
|||||  
2 ATCCCTCTCTTCATT 17

RESULT 294  
ADA99961/c  
ADA99961 standard; DNA; 17 BP.  
ADA99961;

20-NOV-2003 (first entry)

Human MDZ3 scanning oligonucleotide SEQ ID 950.

KW Cytostatic; immunostimulant; gene therapy; vaccine; human;  
KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;  
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;  
KW developmental disorder; ss.  
XX  
XX Homo sapiens.  
XX EP1281758-A2.  
XX 05-FEB-2003.  
XX 30-JUL-2002; 2002EP-00016874.  
XX 02-AUG-2001; 2001US-00922181.  
XX (AEOM-) AEOMICA INC.  
XX Shannon M, Gu Y, Nguyen C;  
XX WPI; 2003-423107/40.  
XX New zinc finger-containing proteins and nucleic acids, useful in  
PT manufacturing a medicament for treating or preventing a disorder  
PT associated with decreased or increased expression or activity of MDZ3,  
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.  
XX  
XX Example 8; SEQ ID NO 950; 103pp; English.  
XX  
XX The present invention relates to novel human zinc finger-containing  
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is  
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,  
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome  
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,  
CC or in manufacturing a medicament for treating or preventing a disorder  
CC associated with decreased or increased expression or activity of MDZ3,  
CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic  
CC acids and proteins are also useful for diagnosing or monitoring a disease  
CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic  
CC acids can also be used as probes to detect and characterize gross  
CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are  
CC useful in constructing microarrays for measuring gene expression. The  
CC proteins are useful as therapeutic agents for gene therapy or as  
CC vaccines. The present sequence was used to illustrate the invention.  
XX  
SQ Sequence 17 BP; 9 A; 2 C; 6 G; 0 T; 0 U; 0 Other;  
Query Match 15.3%; Score 11.2; DB 1; Length 17;  
Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 931 TCCTCTCTCTTCATTG 946  
|||||  
DB 16 TCCTCTCTCTTCATTG 1

RESULT 295  
ADA99958/c  
ID ADA99958 standard; DNA; 17 BP.  
XX  
XX ADA99958;  
XX  
XX 20-NOV-2003 (first entry)  
XX Human MDZ3 scanning oligonucleotide SEQ ID 947.  
XX  
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;  
KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;  
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;  
KW developmental disorder; ss.  
XX  
XX Homo sapiens.  
XX EP1281758-A2.

```
XX 05-FEB-2003.
PD 05-FEB-2003.
XX 30-JUL-2002; 2002EP-00016874.
XX 02-AUG-2001; 2001US-00922181.
XX (AEOM-) AEOMICA INC.
XX Shannon M, Gu Y, Nguyen C;
XX WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
XX Example 8; SEQ ID NO 947; 103pp; English.
XX
XX The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder
CC associated with decreased or increased expression or activity of MDZ3,
CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
XX Sequence 17 BP; 8 A; 1 C; 8 G; 0 T; 0 U; 0 Other;
SQ
Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 933 CCTCCTCTTCATTGGT 948
DB 17 CCTCCTCTTCCTTGT 2
RESULT 296
ADA99960/c
ID ADA99960 standard; DNA; 17 BP.
XX ADA99960;
XX 20-NOV-2003 (first entry)
XX Human MDZ3 scanning oligonucleotide SEQ ID 949.
XX
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
XX chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
XX developmental disorder; ss.
XX Homo sapiens.
XX
XX EP1281758-A2.
XX
XX 05-FEB-2003.
XX 30-JUL-2002; 2002EP-00016874.
XX 02-AUG-2001; 2001US-00922181.
XX (AEOM-) AEOMICA INC.
```

```
XX Shannon M, Gu Y, Nguyen C;
XX WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
XX Example 8; SEQ ID NO 949; 103pp; English.
XX
XX The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder
CC associated with decreased or increased expression or activity of MDZ3,
CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
XX Sequence 17 BP; 8 A; 2 C; 7 G; 0 T; 0 U; 0 Other;
SQ
Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 931 TCCCTCCTCTTCATTG 946
DB 17 TGCCTCCTCTTCCTTG 2
RESULT 297
ADB00252/c
ID ADB00252 standard; DNA; 17 BP.
XX ADB00252;
XX 20-NOV-2003 (first entry)
XX Human MDZ3 scanning oligonucleotide SEQ ID 1238.
XX
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
XX chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
XX developmental disorder; ss.
XX Homo sapiens.
XX
XX EP1281758-A2.
XX
XX 05-FEB-2003.
XX 30-JUL-2002; 2002EP-00016874.
XX 02-AUG-2001; 2001US-00922181.
XX (AEOM-) AEOMICA INC.
XX Shannon M, Gu Y, Nguyen C;
XX WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
```

MDZ4, MDZ7 or MDZ12, e.g. cancer.

Example 8; SEQ ID NO 1238; 103pp; English.

The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.

Sequence 17 BP; 8 A; 4 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

934 CTCCTCTTCATGGTT 949

16 CTCCTCTTCGTTGTT 1

RESULT 298

ADB02204/C

ADB02204 standard; DNA; 17 BP.

ADB02204;

20-NOV-2003 (first entry)

Human MDZ4 scanning oligonucleotide SEQ ID 3190.

Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss.

Homo sapiens.

EP1281758-A2.

05-FEB-2003.

30-JUL-2002; 2002EP-00016874.

02-AUG-2001; 2001US-00922181.

(AEOM-) AEOMICA INC.

Shannon M, Gu Y, Nguyen C;

WPI; 2003-423107/40.

New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7 or MDZ12, e.g. Cancer.

Example 8; SEQ ID NO 3190; 103pp; English.

The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome

15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.

Sequence 17 BP; 8 A; 1 C; 8 G; 0 T; 0 U; 0 Other;

Query Match 15.3%;

Best Local Similarity 81.2%; Score 11.2; DB 1; Length 17;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 929 TATCCCTCTCTTCAT 944

17 TGTCTCTCTCTCTCT 2

RESULT 299

ADB00251/C

ADB00251 standard; DNA; 17 BP.

AC ADB00251;

XX 20-NOV-2003 (first entry)

Human MDZ3 scanning oligonucleotide SEQ ID 1237.

Cytostatic; immunostimulant; gene therapy; vaccine; human;

zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;

chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;

developmental disorder; ss.

XX Homo sapiens.

XX EP1281758-A2.

XX 05-FEB-2003.

XX 30-JUL-2002; 2002EP-00016874.

XX 02-AUG-2001; 2001US-00922181.

XX (AEOM-) AEOMICA INC.

XX Shannon M, Gu Y, Nguyen C;

XX WPI; 2003-423107/40.

New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7 or MDZ12, e.g. Cancer.

Example 8; SEQ ID NO 1237; 103pp; English.

The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are

CC useful in constructing microarrays for measuring gene expression. The  
CC proteins are useful as therapeutic agents for gene therapy or as  
CC vaccines. The present sequence was used to illustrate the invention.  
XX  
SQ Sequence 17 BP; 8 A; 4 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;  
Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 934 CTCCTCTTCATTCGTT 949  
DB 17 CTTCCTTCGTCGTT 2  
|||||

RESULT 300  
ADB02205/C  
ID ADB02205 standard; DNA; 17 BP.  
XX  
AC ADB02205;  
XX  
CT 20-NOV-2003 (first entry)  
XX  
DE Human MD24 scanning oligonucleotide SEQ ID 3191.  
XX  
KW Cytostatic; immunostimulant; gene therapy; vaccine; human;  
KW zinc finger protein; MD23; MD24; MD27; MDZ12; chromosome 7q22.1;  
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;  
KW developmental disorder; ss.  
XX  
OS Homo sapiens.  
XX  
XK EPI281758-A2.  
XX  
PC 05-FEB-2003.  
XX  
PF 30-JUL-2002; 2002EP-00016874.  
XX  
PR 02-AUG-2001; 2001US-00922181.  
XX  
PA (AEOM-) ABOMICA INC.  
XX  
PI Shannon M, Gu Y, Nguyen C;  
XX  
WPI; 2003-423107/40.  
XX  
New zinc finger-containing proteins and nucleic acids, useful in  
PT manufacturing a medicament for treating or preventing a disorder  
PT associated with decreased or increased expression or activity of MD23,  
ET MD24, MD27 or MDZ12, e.g. cancer.  
XX  
Example 8; SEQ ID NO 3191; 103pp; English.  
XX  
The present invention relates to novel human zinc finger-containing  
CC proteins and their coding sequences: MD23, MD24, MDZ7, MDZ12. MDZ3 is  
CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,  
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome  
CC 15q26.1. The MD23, MD24, MDZ7, and MDZ12 sequences are useful in therapy,  
CC or in manufacturing a medicament for treating or preventing a disorder  
CC associated with decreased or increased expression or activity of MD23,  
CC MD24, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic  
CC acids and proteins are also useful for diagnosing or monitoring a disease  
CC caused by altered expression of MD23, MD24, MDZ7, or MDZ12. The nucleic  
CC alterations in MD23, MD24, MDZ7, or MDZ12 genetic locus. The probes are  
CC useful in constructing microarrays for measuring gene expression. The  
CC proteins are useful as therapeutic agents for gene therapy or as  
CC vaccines. The present sequence was used to illustrate the invention.  
XX  
SQ Sequence 17 BP; 8 A; 1 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;  
Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 933 CCTCTCTTCATTCGTT 948  
DB 16 CCTCTCTTCCTTCCT 1  
|||||

RESULT 302

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 929 TATCCCTCTCTTCAT 944  
DB 16 TGTTCCTCTCTTCCT 1  
|||||

RESULT 301  
ADA99959/C  
ID ADA99959 standard; DNA; 17 BP.  
XX  
AC ADA99959;  
XX  
DT 20-NOV-2003 (first entry)  
XX  
DE Human MD23 scanning oligonucleotide SEQ ID 948.  
XX  
KW Cytostatic; immunostimulant; gene therapy; vaccine; human;  
KW zinc finger protein; MD23; MD24; MDZ7; MDZ12; chromosome 7q22.1;  
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;  
KW developmental disorder; ss.  
XX  
OS Homo sapiens.  
XX  
XK EPI281758-A2.  
XX  
PD 05-FEB-2003.  
XX  
PF 30-JUL-2002; 2002EP-00016874.  
XX  
PR 02-AUG-2001; 2001US-00922181.  
XX  
PA (AEOM-) ABOMICA INC.  
XX  
PI Shannon M, Gu Y, Nguyen C;  
XX  
WPI; 2003-423107/40.  
XX  
New zinc finger-containing proteins and nucleic acids, useful in  
PT manufacturing a medicament for treating or preventing a disorder  
PT associated with decreased or increased expression or activity of MD23,  
PT MD24, MDZ7 or MDZ12, e.g. cancer.  
XX  
Example 8; SEQ ID NO 948; 103pp; English.  
XX  
The present invention relates to novel human zinc finger-containing  
CC proteins and their coding sequences: MD23, MD24, MDZ7, MDZ12. MDZ3 is  
CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,  
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome  
CC 15q26.1. The MD23, MD24, MDZ7, and MDZ12 sequences are useful in therapy,  
CC or in manufacturing a medicament for treating or preventing a disorder  
CC associated with decreased or increased expression or activity of MD23,  
CC MD24, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic  
CC acids and proteins are also useful for diagnosing or monitoring a disease  
CC caused by altered expression of MD23, MD24, MDZ7, or MDZ12. The nucleic  
CC alterations in MD23, MD24, MDZ7, or MDZ12 genetic locus. The probes are  
CC useful in constructing microarrays for measuring gene expression. The  
CC proteins are useful as therapeutic agents for gene therapy or as  
CC vaccines. The present sequence was used to illustrate the invention.  
XX  
SQ Sequence 17 BP; 8 A; 2 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;  
Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 933 CCTCTCTTCATTCGTT 948  
DB 16 CCTCTCTTCCTTCCT 1  
|||||





ACD58187/c

ID ACD58187 standard; RNA; 17 BP.

XX

AC ACD58187;

XX

XX 24-SEP-2003 (first entry)

XX

XX HCV DNAzyme substrate sequence #717.

XX

XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;

KW RNA stability; RNA expression; RNA synthesis; antisense;

KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;

KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;

KW HBV reverse transcriptase; Enhancer I region; viral replication;

KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;

KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;

KW virucide; antiinflammatory; substrate; ss.

XX

OS Hepatitis C virus.

XX

XX WO200281494-A1.

XX

XX 17-OCT-2002.

XX

XX 26-MAR-2002; 2002WO-US009187.

XX

XX 26-MAR-2001; 2001US-00817879.

XX

XX 08-JUN-2001; 2001US-00877478.

XX

XX 08-JUN-2001; 2001US-0296876P.

XX

XX 24-OCT-2001; 2001US-0335059P.

XX

XX 05-DEC-2001; 2001US-0337055P.

XX

XX (RIBO-) RIBOZYME PHARM INC.

XX

XX (BLAT/) BLATT L.

XX

XX (MACE/) MACEJAK D.

XX

XX (MCSW/) MCSWIGGEN J.

XX

XX (MORR/) MORRISSEY D.

XX

XX (PAVC/) PAVCO P.

XX

XX (LEEP/) LEE P.

XX

XX (DRAP/) DRAPER K.

XX

XX (ROBE/) ROBERTS E.

XX

XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;

XX

XX Draper K, Roberts E;

XX

XX WPI; 2003-229207/22.

XX

XX Novel compound useful for treating cirrhosis, liver failure,

XX hepatocellular carcinoma, or condition associated with hepatitis C virus

XX infection.

XX

XX Claim 1; Page 246; 387pp; English.

XX

XX The present invention relates to nucleic acid molecules which modulate

XX the synthesis, expression and/or stability of Hepatitis C virus (HCV) or

XX Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense

XX and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,

XX inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed

XX are nucleic acid decoy molecules and aptamers that bind to HBV reverse

XX transcriptase and/or HBV reverse transcriptase primer sequences, as well

XX as oligonucleotides that specifically bind the Enhancer I region of HBV

XX DNA. The nucleic acids may be used to modulate the expression of HBV

XX genes and HBV viral replication. Also disclosed is a method for screening

XX compounds and/or potential therapies directed against HBV, and compounds

XX that modulate the expression and/or replication of HCV. The compounds and

XX methods of the invention are useful for the treatment of degenerative and

XX disease states related to HBV and HCV infection, replication and gene

XX expression such as cirrhosis, liver failure, and hepatocellular

XX carcinoma. The present sequence represents a substrate for one of the HCV

XX DNAzyme or minus strand DNAzyme sequences disclosed in the present

XX invention

XX Sequence 17 BP; 4 A; 3 C; 3 G; 0 T; 7 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 950 TAATGTATCGCTACCA 965

DB 16 TAAGTATTGCAACCA 1

RESULT 305

ACD57474

ID ACD57474 standard; RNA; 17 BP.

XX

AC ACD57474;

XX

XX 23-SEP-2003 (first entry)

XX

XX HCV DNAzyme substrate sequence #340.

XX

XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;

KW RNA stability; RNA expression; RNA synthesis; antisense;

KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;

KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;

KW HBV reverse transcriptase; Enhancer I region; viral replication;

KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;

KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;

KW virucide; antiinflammatory; substrate; ss.

XX

OS Hepatitis C virus.

XX

XX WO200281494-A1.

XX

XX 17-OCT-2002.

XX

XX 26-MAR-2002; 2002WO-US009187.

XX

XX 26-MAR-2001; 2001US-00817879.

XX

XX 08-JUN-2001; 2001US-00877478.

XX

XX 08-JUN-2001; 2001US-0296876P.

XX

XX 24-OCT-2001; 2001US-0335059P.

XX

XX (RIBO-) RIBOZYME PHARM INC.

XX

XX (BLAT/) BLATT L.

XX

XX (MACE/) MACEJAK D.

XX

XX (MCSW/) MCSWIGGEN J.

XX

XX (MORR/) MORRISSEY D.

XX

XX (PAVC/) PAVCO P.

XX

XX (LEEP/) LEE P.

XX

XX (DRAP/) DRAPER K.

XX

XX (ROBE/) ROBERTS E.

XX

XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;

XX

XX Draper K, Roberts E;

XX

XX WPI; 2003-229207/22.

XX

XX Novel compound useful for treating cirrhosis, liver failure,

XX hepatocellular carcinoma, or condition associated with hepatitis C virus

XX infection.

XX

XX Claim 1; Page 240; 387pp; English.

XX

XX The present invention relates to nucleic acid molecules which modulate

XX the synthesis, expression and/or stability of Hepatitis C virus (HCV) or

XX Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense

XX and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,

XX inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed

XX are nucleic acid decoy molecules and aptamers that bind to HBV reverse

XX transcriptase and/or HBV reverse transcriptase primer sequences, as well

XX as oligonucleotides that specifically bind the Enhancer I region of HBV

XX DNA. The nucleic acids may be used to modulate the expression of HBV

genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HCV DNzyme or minus strand DNzyme sequences disclosed in the present invention

Sequence 17 BP; 3 A; 6 C; 1 G; 0 T; 7 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 43.8%; Pred. No. 7.9e+02;

Matches 7; Conservative 6; Mismatches 3; Indels 0; Gaps 0;

919 CTTTGGCTTTATCC 934

1 CCUUGCCUAUAUCC 16

RESULT 306

AD60953

ACD60953 standard; RNA; 17 BP.

ACD60953;

24-SEP-2003 (first entry)

HCV DNzyme substrate sequence #2083.

Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degenerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.

Hepatitis C virus.

WO200281494-A1.

17-OCT-2002.

26-MAR-2002; 2002WO-US009187.

26-MAR-2001; 2001US-00817879.

08-JUN-2001; 2001US-00877478.

08-JUN-2001; 2001US-0296876P.

24-OCT-2001; 2001US-0335059P.

05-DEC-2001; 2001US-0337055P.

(RIBO-) RIBOZYME PHARM INC.

(BLAT/) BLATT L.

(MACE/) MACEJAK D.

(MCSW/) MCSWIGGEN J.

(MORR/) MORRISSEY D.

(PAVC/) PAVCO P.

(LEEF/) LEE P.

(DRAP/) DRAPER K.

(ROBE/) ROBERTS E.

Blatt L, Macejak D, Mcswiggen J, Morrissey J, Morrissey D, Pavco P, Lee P;

Draper K, Roberts E;

WPI; 2003-229207/22.

Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus infection.

PS Claim 1; Page 271; 387pp; English.

XX The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNzymes, inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase and/or HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HCV DNzyme or minus strand DNzyme sequences disclosed in the present invention

SQ Sequence 17 BP; 2 A; 4 C; 4 G; 0 T; 7 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 37.5%; Pred. No. 7.9e+02;

Matches 6; Conservative 7; Mismatches 3; Indels 0; Gaps 0;

QY 900 CCTGTCATTTCTTT 915

2 CCUGGCGUAUCUGU 17

RESULT 307

ACD51881

ID ACD51881 standard; RNA; 17 BP.

XX

AC ACD51881;

DT 24-SEP-2003 (first entry)

XX

DE HBV inozyme substrate sequence #113.

XX

KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;

KW RNA stability; RNA expression; RNA synthesis; antisense;

KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;

KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;

KW HBV reverse transcriptase; Enhancer I region; viral replication;

KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;

KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;

KW virucide; antiinflammatory; substrate; ss.

XX

OS Hepatitis B virus.

XX

PN WO200281494-A1.

XX

PD 17-OCT-2002.

XX

PF 26-MAR-2002; 2002WO-US009187.

XX

PR 26-MAR-2001; 2001US-00817879.

PR 08-JUN-2001; 2001US-00877478.

PR 08-JUN-2001; 2001US-0296876P.

PR 24-OCT-2001; 2001US-0335059P.

PR 05-DEC-2001; 2001US-0337055P.

XX

XX (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MACE/) MACEJAK D.

PA (MCSW/) MCSWIGGEN J.

PA (MORR/) MORRISSEY D.

PA (PAVC/) PAVCO P.

PA (LEEF/) LEE P.

PA (DRAP/) DRAPER K.

```

PA (ROBE/) ROBERTS E.
XX
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX
XX WPI; 2003-229207/22.
XX
XX Novel compound useful for treating cirrhosis, liver failure,
XX hepatocellular carcinoma, or condition associated with hepatitis C virus
XX infection.
XX
XX Example 1; Page 152; 387pp; English.
XX
XX The present invention relates to nucleic acid molecules which modulate
XX the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
XX Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
XX and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
XX inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
XX are nucleic acid decoy molecules and aptamers that bind to HBV reverse
XX transcriptase and/or HBV reverse transcriptase primer sequences, as well
XX as oligonucleotides that specifically bind the Enhancer I region of HBV
XX DNA. The nucleic acids may be used to modulate the expression of HBV
XX genes and HBV viral replication. Also disclosed is a method for screening
XX compounds and/or potential therapies directed against HBV, and compounds
XX that modulate the expression and/or replication of HCV. The compounds and
XX methods of the invention are useful for the treatment of degenerative and
XX disease states related to HBV and HCV infection, replication and gene
XX expression such as cirrhosis, liver failure, and hepatocellular
XX carcinoma. The present sequence represents a substrate for one of the HBV
XX ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberyze sequences
XX disclosed in the present invention
XX
XX Sequence 17 BP; 2 A; 5 C; 2 G; 0 T; 8 U; 0 Other;
XX
XX Query Match 15.3%; Score 11.2; DB 1; Length 17;
XX Best Local Similarity 37.5%; Pred. No. 7.9e+02;
XX Matches 6; Conservative 7; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 929 TATCCCTCTCTTCAT 944
XX :|:|:|:|:|:|:
XX CB 1 UAUGCCUACUACUUGU 16
XX
XX RESULT 308
XX ACB64075
XX ID ACD64075 standard; RNA; 17 BP.
XX AC ACD64075;
XX DT 30-SEP-2003 (first entry)
XX DE HCV minus strand DNazyme substrate sequence #1378.
XX
XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX RNA stability; RNA expression; RNA synthesis; antisense;
XX enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
XX amberyze; G-cleaver ribozyme; decoy molecule; aptamer;
XX HBV reverse transcriptase; Enhancer I region; viral replication;
XX degenerative; disease state; HBV infection; HCV infection; cirrhosis;
XX liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX virucide; antiinflammatory; substrate; ss.
XX
XX Hepatitis C virus.
XX
XX WO200281494-A1.
XX
XX 17-OCT-2002.
XX
XX 26-MAR-2002; 2002WO-US009187.
XX
XX 26-MAR-2001; 2001US-00817879.
XX
XX 08-JUN-2001; 2001US-00877478.
XX
XX 08-JUN-2001; 2001US-0296876P.

```

```

PR 24-OCT-2001; 2001US-0335059P.
XX 05-DEC-2001; 2001US-0337055P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX (BLAT/) BLATT L.
XX (MACE/) MACEJAK D.
XX (MCSW/) MCSWIGGEN J.
XX (MORE/) MORRISSEY D.
XX (PAVC/) PAVCO P.
XX (LEEF/) LEE P.
XX (DRAP/) DRAPER K.
XX (ROBE/) ROBERTS E.
XX
XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
XX Draper K, Roberts E;
XX
XX WPI; 2003-229207/22.
XX
XX Novel compound useful for treating cirrhosis, liver failure,
XX hepatocellular carcinoma, or condition associated with hepatitis C virus
XX infection.
XX
XX Claim 1; Page 299; 387pp; English.
XX
XX The present invention relates to nucleic acid molecules which modulate
XX the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
XX Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
XX and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
XX inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
XX are nucleic acid decoy molecules and aptamers that bind to HBV reverse
XX transcriptase and/or HBV reverse transcriptase primer sequences, as well
XX as oligonucleotides that specifically bind the Enhancer I region of HBV
XX DNA. The nucleic acids may be used to modulate the expression of HBV
XX genes and HBV viral replication. Also disclosed is a method for screening
XX compounds and/or potential therapies directed against HBV, and compounds
XX that modulate the expression and/or replication of HCV. The compounds and
XX methods of the invention are useful for the treatment of degenerative and
XX disease states related to HBV and HCV infection, replication and gene
XX expression such as cirrhosis, liver failure, and hepatocellular
XX carcinoma. The present sequence represents a substrate for one of the HCV
XX DNazyme or minus strand DNazyme sequences disclosed in the present
XX invention
XX
XX Sequence 17 BP; 2 A; 4 C; 5 G; 0 T; 6 U; 0 Other;
XX
XX Query Match 15.3%; Score 11.2; DB 1; Length 17;
XX Best Local Similarity 43.8%; Pred. No. 7.9e+02;
XX Matches 7; Conservative 6; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 933 CCTCCTCTCTTCATTTGGT 948
XX ||:|:|:|:|:|:|:
XX Db 1 CCUGGUCUACUACUUGGU 16
XX
XX RESULT 309
XX ACD57814/c
XX ID ACD57814 standard; RNA; 17 BP.
XX
XX ACD57814;
XX AC ACD57814;
XX
XX 23-SEP-2003 (first entry)
XX
XX HCV DNazyme substrate sequence #512.
XX
XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX RNA stability; RNA expression; RNA synthesis; antisense;
XX enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
XX amberyze; G-cleaver ribozyme; decoy molecule; aptamer;
XX HBV reverse transcriptase; Enhancer I region; viral replication;
XX degenerative; disease state; HBV infection; HCV infection; cirrhosis;
XX liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX virucide; antiinflammatory; substrate; ss.

```

Hepatitis C virus.

WO200281494-A1.

17-OCT-2002.

26-MAR-2002; 2002WO-US009187.

26-MAR-2001; 2001US-00817879.

08-JUN-2001; 2001US-00877478.

08-JUN-2001; 2001US-0296876P.

24-OCT-2001; 2001US-0335059P.

05-DEC-2001; 2001US-0337055P.

(RIBO-) RIBOZYME PHARM INC.

(BLAT/) BLATT L.

(MACE/) MACEJAK D.

(MCSW/) MCSWIGGEN J.

(MORR/) MORRISSEY D.

(PAVC/) PAVCO P.

(LEEP/) LEE P.

(DRAP/) DRAPER K.

(ROBE/) ROBERTS E.

Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;

Draper K, Roberts E;

WPI; 2003-229207/22.

Novel compound useful for treating cirrhosis, liver failure,

hepatocellular carcinoma, or condition associated with hepatitis C virus

infection.

Claim 1; Page 243; 387pp; English.

The present invention relates to nucleic acid molecules which modulate

the synthesis, expression and/or stability of Hepatitis C virus (HCV) or

Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense

and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,

inozymes, zinzymes, amberyms, and G-cleaver ribozymes. Also disclosed

are nucleic acid decoy molecules and aptamers that bind to HBV reverse

transcriptase and/or HBV reverse transcriptase primer sequences, as well

as oligonucleotides that specifically bind the Enhancer I region of HBV

DNA. The nucleic acids may be used to modulate the expression of HBV

genes and HBV viral replication. Also disclosed is a method for screening

compounds and/or potential therapies directed against HBV, and compounds

that modulate the expression and/or replication of HCV. The compounds and

methods of the invention are useful for the treatment of degenerative and

disease states related to HBV and HCV infection, replication and gene

expression such as cirrhosis, liver failure, and hepatocellular

carcinoma. The present sequence represents a substrate for one of the HCV

DNAzyme or minus strand DNAzyme sequences disclosed in the present

invention

Sequence 17 BP; 6 A; 5 C; 3 G; 0 T; 3 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

949 TTAATGATACCTACC 964

|||||

17 TTAAGGTGTCGTACC 2

|||||

SULT 310

D65196/C

ACD65196 standard; RNA; 17 BP.

ACD65196;

30-SEP-2003 (first entry)

DE

XX

KW

KW

KW

KW

KW

KW

KW

OS

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

HCV minus strand DNAzyme substrate sequence #1939.

Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;

RNA stability; RNA expression; RNA synthesis; antisense;

enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;

amzyme; G-cleaver ribozyme; decoy molecule; aptamer;

HBV reverse transcriptase; Enhancer I region; viral replication;

degenerative; disease state; HBV infection; HCV infection; cirrhosis;

liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;

virucide; antiinflammatory; substrate; ss.

Hepatitis C virus.

WO200281494-A1.

17-OCT-2002.

26-MAR-2002; 2002WO-US009187.

26-MAR-2001; 2001US-00817879.

08-JUN-2001; 2001US-00877478.

08-JUN-2001; 2001US-0296876P.

24-OCT-2001; 2001US-0335059P.

05-DEC-2001; 2001US-0337055P.

(RIBO-) RIBOZYME PHARM INC.

(BLAT/) BLATT L.

(MACE/) MACEJAK D.

(MCSW/) MCSWIGGEN J.

(MORR/) MORRISSEY D.

(PAVC/) PAVCO P.

(LEEP/) LEE P.

(DRAP/) DRAPER K.

(ROBE/) ROBERTS E.

Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;

Draper K, Roberts E;

WPI; 2003-229207/22.

Novel compound useful for treating cirrhosis, liver failure,

hepatocellular carcinoma, or condition associated with hepatitis C virus

infection.

Claim 1; Page 309; 387pp; English.

The present invention relates to nucleic acid molecules which modulate

the synthesis, expression and/or stability of Hepatitis C virus (HCV) or

Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense

and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,

inozymes, zinzymes, amberyms, and G-cleaver ribozymes. Also disclosed

are nucleic acid decoy molecules and aptamers that bind to HBV reverse

transcriptase and/or HBV reverse transcriptase primer sequences, as well

as oligonucleotides that specifically bind the Enhancer I region of HBV

DNA. The nucleic acids may be used to modulate the expression of HBV

genes and HBV viral replication. Also disclosed is a method for screening

compounds and/or potential therapies directed against HBV, and compounds

that modulate the expression and/or replication of HCV. The compounds and

methods of the invention are useful for the treatment of degenerative and

disease states related to HBV and HCV infection, replication and gene

expression such as cirrhosis, liver failure, and hepatocellular

carcinoma. The present sequence represents a substrate for one of the HCV

DNAzyme or minus strand DNAzyme sequences disclosed in the present

invention

Sequence 17 BP; 7 A; 4 C; 4 G; 0 T; 2 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

916 GGTCTTTGCGCTTTTAT 931

|||||

916 GGTCTTTGCGCTTTTAT 931

|||||

916 GGTCTTTGCGCTTTTAT 931

|||||

916 GGTCTTTGCGCTTTTAT 931

|||||

916 GGTCTTTGCGCTTTTAT 931

|||||

916 GGTCTTTGCGCTTTTAT 931

|||||

916 GGTCTTTGCGCTTTTAT 931

|||||

916 GGTCTTTGCGCTTTTAT 931

|||||

916 GGTCTTTGCGCTTTTAT 931

|||||

916 GGTCTTTGCGCTTTTAT 931

|||||

916 GGTCTTTGCGCTTTTAT 931

|||||

916 GGTCTTTGCGCTTTTAT 931

|||||

916 GGTCTTTGCGCTTTTAT 931

|||||



are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase and/or HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HCV DNzyme or minus strand DNzyme sequences disclosed in the present invention

Sequence 17 BP; 3 A; 3 C; 5 G; 0 T; 6 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;  
Best Local Similarity 50.0%; Pred. No. 7.9e+02;  
Matches 8; Conservative 5; Mismatches 3; Indels 0; Gaps 0;

949 TTAATGTATCGCTACC 964  
::|||::|||::|||  
2 UUAAGGUGUGUACC 17

RESULT 313  
AC64042  
ACC64042 standard; DNA; 17 BP.

ACC64042;

01-JUL-2003 (first entry)

Murine oligonucleotide associated with tumour suppression, SEQ ID 1289.

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; ss.

Mus musculus.

WO2003025176-A2.

27-MAR-2003.

17-SEP-2002; 2002WO-IB004210.

17-SEP-2001; 2001FR-00011979.

(MOLE-) MOLECULAR ENGINES LAB.

Telerman A, Amson R, Tuijnder M;

WPI; 2003-333167/31.

New isolated nucleic acid, useful for treating viral diseases associated with tumours and cell degeneration, also related polypeptides, antibodies and transfected cells.

Disclosure; Page 181; 738pp; French.

The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia

SQ Sequence 17 BP; 5 A; 4 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;  
Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 930 ATCCCTCCTCTCAAT 945

DB 2 ATCCCTACTATTAAAT 17

RESULT 314  
ADB40878/c

ID ADB40878 standard; DNA; 17 BP.

XX ADB40878;

XX 18-DEC-2003 (revised)

DT 04-DEC-2003 (first entry)

XX Tumour suppression/reversion associated nucleotide #1201.

XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;

KW primer; probe; tumour suppression; tumour reversion; apoptosis;

KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia; diagnosis.

XX Homo sapiens.

XX WO2003040369-A2.

XX 15-MAY-2003.

XX 17-SEP-2002; 2002WO-IB004219.

XX 17-SEP-2001; 2001FR-00011981.

XX (MOLE-) MOLECULAR ENGINES LAB.

XX Telerman A, Amson R, Tuijnder M;

XX WPI; 2003-441574/41.

XX New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumours and viral infection, also related polypeptide and antibodies.

XX Disclosure; Page 172; 771pp; French.

The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia). Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal expression of the nucleotides.

SQ Sequence 17 BP; 6 A; 2 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02; Mismatches 3; Indels 0; Gaps 0;

Matches 13; Conservative 0;

QY 933 CTTCTTCATGTTT 948  
 Db 17 CATCTTCATGTTT 2

RESULT 315  
 ADB42247  
 ID ADB42247 standard; DNA; 17 BP.  
 AC ADB42247;  
 XX  
 XX 18-DEC-2003 (revised)  
 DT 04-DEC-2003 (first entry)  
 XX  
 XX Tumour suppression/reversion associated nucleotide #2570.  
 DE  
 XX cytostatic; antiviral; neuroprotective; nontropic; neuroleptic; ss;  
 XX primer; probe; tumour suppression; tumour reversion; apoptosis;  
 XX virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;  
 XX diagnosis.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO2003040369-A2.  
 XX  
 XX 15-MAY-2003.  
 XX  
 XX 17-SEP-2002; 2002WO-IB004219.  
 XX  
 XX 17-SEP-2001; 2001FR-00011981.  
 XX  
 XX (MOLE-) MOLECULAR ENGINES LAB.  
 XX  
 XX Telerman A, Amson R, Tuijnder M;  
 XX WPI; 2003-441574/41.  
 XX  
 XX New nucleic acid encoding human prostate membrane-specific antigen,  
 PT useful e.g. for treatment of tumors and viral infection, also related  
 PT polypeptide and antibodies.  
 XX  
 XX Disclosure; Page 332; 771pp; French.  
 XX  
 XX The invention relates to the isolation of 6327 nucleotide sequences,  
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a  
 CC sequence having at least 80% identity, after optimal alignment, with the  
 CC nucleotides, a sequence that hybridizes under stringent conditions with  
 CC the nucleotides, or the complement, or corresponding RNA, of the  
 CC nucleotides. The nucleotides are used as probes or primers for detecting,  
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro  
 CC sense and antisense sequences, of nucleotides involved in tumour  
 CC suppression or reversion, apoptosis and or viral resistance, to produce  
 CC recombinant polypeptides, and to prepare transgenic animals, as  
 CC experimental models. The nucleotides (also vectors containing them and  
 CC cells containing the vectors), the encoded polypeptides and antibodies  
 CC (Ab) against the polypeptide are useful for prevention and/or treatment  
 CC of viral infections or diseases characterized by development of tumours  
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).  
 CC Analysis of the expression of the nucleotides can be used for diagnosis  
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can  
 CC also be used to screen for their specific interactive molecules,  
 CC potentially useful for treating diseases associated with abnormal  
 CC expression of the nucleotides.  
 XX  
 XX Sequence 17 BP; 2 A; 3 C; 2 G; 10 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;  
 Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
 Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 933 CTTCTTCATGTTT 950  
 Db 2 TCTTCTCAATGTTT 17

RESULT 317  
 ADC04002  
 ID ADC04002 standard; DNA; 17 BP.  
 XX  
 XX AC ADC04002;

QY 916 GGTCTTTGCTTTTAT 931  
 Db 1 GATCTTTCTGTTTAT 16

RESULT 316  
 ADC03999  
 ID ADC03999 standard; DNA; 17 BP.  
 XX  
 XX ADC03999;  
 XX  
 XX 18-DEC-2003 (first entry)  
 XX  
 XX Human Na/H exchanger-like protein 1 gene oligonucleotide #446.  
 DE  
 XX ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;  
 XX NHPLP1; passive replacement therapy; vaccine; diagnosis.  
 XX  
 XX Homo sapiens.  
 OS  
 XX EP1273660-A2.  
 XX  
 XX 08-JAN-2003.  
 XX  
 XX 25-JAN-2002; 2002EP-00001160.  
 XX  
 XX 30-JAN-2001; 2001WO-US000666.  
 XX  
 XX 23-MAY-2001; 2001US-00864761.  
 XX  
 XX 21-DEC-2001; 2001US-0343331P.  
 XX  
 XX (AEOM-) AEOMICA INC.  
 XX  
 XX Gu Y;  
 XX WPI; 2003-302724/30.  
 XX  
 XX New human sodium-hydrogen exchanger like protein 1 (NHPLP1), useful as a  
 PT passive replacement therapy or as a vaccine for treating or preventing  
 PT disorders associated with aberrant expression or activity of human  
 PT NHPLP1.  
 XX  
 XX Example 2; SEQ ID NO 486; 468pp; English.  
 XX  
 XX The invention relates to a nucleic acid molecule which encodes a Na+/H+  
 CC exchanger like protein (NHPLP1). The NHPLP1 nucleic acid molecule, NHPLP1  
 CC polypeptide, an antibody against the protein or its antigen-binding  
 CC fragment is useful in therapy. The NHPLP1 nucleic acid molecule, NHPLP1  
 CC polypeptide and an agonist are particularly useful for manufacturing a  
 CC medicament for treating or preventing a disorder associated with  
 CC decreased expression or activity of human NHPLP1. The antibody or its  
 CC antigen-binding fragment, and an antagonist, are useful for manufacturing  
 CC a medicament for treating or preventing a disorder associated with  
 CC increased expression or activity of human NHPLP1. The NHPLP1 nucleic acid  
 CC or protein is useful as passive replacement therapy, as a vaccine, or in  
 CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide  
 CC spanning the sequence of the human NHPLP1 gene (ADC03514).  
 XX  
 XX Sequence 17 BP; 3 A; 3 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;  
 Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
 Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 935 TCTCTTCATGTTT 950  
 Db 2 TCTTCTCAATGTTT 17

RESULT 317  
 ADC04002  
 ID ADC04002 standard; DNA; 17 BP.  
 XX  
 XX AC ADC04002;

18-DEC-2003 (first entry)  
 Human Na/H exchanger-like protein 1 gene oligonucleotide #449.  
 ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;  
 NHEPL1; passive replacement therapy; vaccine; diagnosis.  
 Homo sapiens.  
 EP1273660-A2.  
 08-JAN-2003.  
 25-JAN-2002; 2002EP-00001160.  
 30-JAN-2001; 2001WO-US000666.  
 23-MAY-2001; 2001US-00864761.  
 21-DEC-2001; 2001US-0343331P.  
 (AEOM-) AEOMICA INC.  
 Gu Y;  
 WPI; 2003-302724/30.  
 New human sodium-hydrogen exchanger like protein 1 (NHEPL1), useful as a  
 passive replacement therapy or as a vaccine for treating or preventing  
 disorders associated with aberrant expression or activity of human  
 NHEPL1.  
 Example 2; SEQ ID NO 489; 468pp; English.  
 The invention relates to a nucleic acid molecule which encodes a Na<sup>+</sup>/H<sup>+</sup>  
 exchanger like protein (NHEPL1). The NHEPL1 nucleic acid molecule, NHEPL1  
 polypeptide, an antibody against the protein or its antigen-binding  
 fragment is useful in therapy. The NHEPL1 nucleic acid molecule, NHEPL1  
 polypeptide and an agonist are particularly useful for manufacturing a  
 medicament for treating or preventing a disorder associated with  
 decreased expression or activity of human NHEPL1. The antibody or its  
 antigen-binding fragment, and an antagonist, are useful for manufacturing  
 a medicament for treating or preventing a disorder associated with  
 increased expression or activity of human NHEPL1. The NHEPL1 nucleic acid  
 or protein is useful as passive replacement therapy, as a vaccine, or in  
 diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide  
 spanning the sequence of the human NHEPL1 gene (ADC03514).  
 Sequence 17 BP; 3 A; 3 C; 1 G; 10 T; 0 U; 0 Other;  
 Query Match 15.3%; Score 11.2; DB 1; Length 17;  
 Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
 Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 938 TCCTTCATTGGTTTAAAT 953  
 2 TCCTCAATGGTTTAACT 17  
 SULT 318  
 C04126  
 ADC04126 standard; DNA; 17 BP.  
 ADC04126;  
 18-DEC-2003 (first entry)  
 Human Na/H exchanger-like protein 1 gene oligonucleotide #573.  
 ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;  
 NHEPL1; passive replacement therapy; vaccine; diagnosis.  
 Homo sapiens.

PN EP1273660-A2.  
 XX 08-JAN-2003.  
 XX 25-JAN-2002; 2002EP-00001160.  
 PF 30-JAN-2001; 2001WO-US000666.  
 PR 23-MAY-2001; 2001US-00864761.  
 PR 21-DEC-2001; 2001US-0343331P.  
 XX (AEOM-) AEOMICA INC.  
 PA Gu Y;  
 XX WPI; 2003-302724/30.  
 XX New human sodium-hydrogen exchanger like protein 1 (NHEPL1), useful as a  
 PT passive replacement therapy or as a vaccine for treating or preventing  
 PT disorders associated with aberrant expression or activity of human  
 PT NHEPL1.  
 XX Example 2; SEQ ID NO 613; 468pp; English.  
 PS The invention relates to a nucleic acid molecule which encodes a Na<sup>+</sup>/H<sup>+</sup>  
 XX exchanger like protein (NHEPL1). The NHEPL1 nucleic acid molecule, NHEPL1  
 CC polypeptide, an antibody against the protein or its antigen-binding  
 CC fragment is useful in therapy. The NHEPL1 nucleic acid molecule, NHEPL1  
 CC polypeptide and an agonist are particularly useful for manufacturing a  
 CC medicament for treating or preventing a disorder associated with  
 CC decreased expression or activity of human NHEPL1. The antibody or its  
 CC antigen-binding fragment, and an antagonist, are useful for manufacturing  
 CC a medicament for treating or preventing a disorder associated with  
 CC increased expression or activity of human NHEPL1. The NHEPL1 nucleic acid  
 CC or protein is useful as passive replacement therapy, as a vaccine, or in  
 CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide  
 CC spanning the sequence of the human NHEPL1 gene (ADC03514).  
 XX Sequence 17 BP; 4 A; 2 C; 4 G; 7 T; 0 U; 0 Other;  
 SQ Query Match 15.3%; Score 11.2; DB 1; Length 17;  
 Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
 Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 938 TCCTTCATTGGTTTAAAT 953  
 DB 1 TCGTCATAGGGTTTAAAT 16  
 RESULT 319  
 ADC04004  
 ID ADC04004 standard; DNA; 17 BP.  
 XX ADC04004;  
 AC 18-DEC-2003 (first entry)  
 XX Human Na/H exchanger-like protein 1 gene oligonucleotide #451.  
 DE ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;  
 XX NHEPL1; passive replacement therapy; vaccine; diagnosis.  
 KW Homo sapiens.  
 XX EP1273660-A2.  
 PN 08-JAN-2003.  
 PD 25-JAN-2002; 2002EP-00001160.  
 PF 30-JAN-2001; 2001WO-US000666.  
 PR 23-MAY-2001; 2001US-00864761.  
 PR 21-DEC-2001; 2001US-0343331P.  
 XX



```

FA (AEOM-) AEOMICA INC.
XX
XX Gu Y;
XX
XX WPI; 2003-302724/30.
XX
XX New human sodium-hydrogen exchanger like protein 1 (NHEPL1), useful as a
XX passive replacement therapy or as a vaccine for treating or preventing
XX disorders associated with aberrant expression or activity of human
XX NHEPL1.
XX
XX Example 2; SEQ ID NO 491; 468pp; English.
XX
XX The invention relates to a nucleic acid molecule which encodes a Na+/H+
XX exchanger like protein (NHEPL1). The NHEPL1 nucleic acid molecule, NHEPL1
XX polypeptide, an antibody against the protein or its antigen-binding
XX fragment is useful in therapy. The NHEPL1 nucleic acid molecule, NHEPL1
XX polypeptide and an agonist are particularly useful for manufacturing a
XX medicament for treating or preventing a disorder associated with
XX decreased expression or activity of human NHEPL1. The antibody or its
XX antigen-binding fragment, and an antagonist, are useful for manufacturing
XX a medicament for treating or preventing a disorder associated with
XX increased expression or activity of human NHEPL1. The NHEPL1 nucleic acid
XX or protein is useful as passive replacement therapy, as a vaccine, or in
XX diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
XX spanning the sequence of the human NHEPL1 gene (ADC03514).
XX
XX Sequence 17 BP; 3 A; 4 C; 2 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 15.3%; Score 11.2; DB 1; Length 17;
XX Best Local Similarity 81.2%; Pred. No. 7.9e+02;
XX Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 939 CTTCAATGCGTTTAATG 954
DQ ||||| ||||| ||
1 CTTCAATGTTTACTG 16
XX
XX
XX RESULT 320
XX ADC04260
XX ID ADC04260 standard; DNA; 17 BP.
XX
XX ADC04260;
XX
XX 18-DEC-2003 (first entry)
XX
XX Human Na/H exchanger-like protein 1 gene oligonucleotide #707.
XX
XX ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
XX NHEPL1; passive replacement therapy; vaccine; diagnosis.
XX
XX Homo sapiens.
XX
XX EP1273660-A2.
XX
XX 08-JAN-2003.
XX
XX 25-JAN-2002; 2002EP-00001160.
XX
XX 30-JAN-2001; 2001WO-US000666.
XX
XX 23-MAY-2001; 2001US-00864761.
XX
XX 21-DEC-2001; 2001US-0343331P.
XX
XX (AEOM-) AEOMICA INC.
XX
XX Gu Y;
XX
XX WPI; 2003-302724/30.
XX
XX New human sodium-hydrogen exchanger like protein 1 (NHEPL1), useful as a
XX passive replacement therapy or as a vaccine for treating or preventing
XX disorders associated with aberrant expression or activity of human
XX NHEPL1.

```

```

XX
XX Example 2; SEQ ID NO 747; 468pp; English.
XX
XX The invention relates to a nucleic acid molecule which encodes a Na+/H+
XX exchanger like protein (NHEPL1). The NHEPL1 nucleic acid molecule, NHEPL1
XX polypeptide, an antibody against the protein or its antigen-binding
XX fragment is useful in therapy. The NHEPL1 nucleic acid molecule, NHEPL1
XX polypeptide and an agonist are particularly useful for manufacturing a
XX medicament for treating or preventing a disorder associated with
XX decreased expression or activity of human NHEPL1. The antibody or its
XX antigen-binding fragment, and an antagonist, are useful for manufacturing
XX a medicament for treating or preventing a disorder associated with
XX increased expression or activity of human NHEPL1. The NHEPL1 nucleic acid
XX or protein is useful as passive replacement therapy, as a vaccine, or in
XX diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
XX spanning the sequence of the human NHEPL1 gene (ADC03514).
XX
XX Sequence 17 BP; 3 A; 5 C; 3 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 15.3%; Score 11.2; DB 1; Length 17;
XX Best Local Similarity 81.2%; Pred. No. 7.9e+02;
XX Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 901 CTGGTCATTTTCTTGTG 916
DQ ||||| ||||| ||
1 CTGGCCATTTTCCATG 16
XX
XX
XX RESULT 321
XX ADC04125
XX ID ADC04125 standard; DNA; 17 BP.
XX
XX ADC04125;
XX
XX 18-DEC-2003 (first entry)
XX
XX Human Na/H exchanger-like protein 1 gene oligonucleotide #572.
XX
XX ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
XX NHEPL1; passive replacement therapy; vaccine; diagnosis.
XX
XX Homo sapiens.
XX
XX EP1273660-A2.
XX
XX 08-JAN-2003.
XX
XX 25-JAN-2002; 2002EP-00001160.
XX
XX 30-JAN-2001; 2001WO-US000666.
XX
XX 23-MAY-2001; 2001US-00864761.
XX
XX 21-DEC-2001; 2001US-0343331P.
XX
XX (AEOM-) AEOMICA INC.
XX
XX Gu Y;
XX
XX WPI; 2003-302724/30.
XX
XX New human sodium-hydrogen exchanger like protein 1 (NHEPL1), useful as a
XX passive replacement therapy or as a vaccine for treating or preventing
XX disorders associated with aberrant expression or activity of human
XX NHEPL1.
XX
XX Example 2; SEQ ID NO 612; 468pp; English.
XX
XX The invention relates to a nucleic acid molecule which encodes a Na+/H+
XX exchanger like protein (NHEPL1). The NHEPL1 nucleic acid molecule, NHEPL1
XX polypeptide, an antibody against the protein or its antigen-binding
XX fragment is useful in therapy. The NHEPL1 nucleic acid molecule, NHEPL1
XX polypeptide and an agonist are particularly useful for manufacturing a
XX medicament for treating or preventing a disorder associated with
XX decreased expression or activity of human NHEPL1. The antibody or its

```

antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with increased expression or activity of human NHELP1. The NHELP1 nucleic acid or protein is useful as passive replacement therapy, as a vaccine, or in diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide spanning the sequence of the human NHELP1 gene (ADC03514).

Sequence 17 BP; 5 A; 2 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02; Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

938 TCTTCATTGGTTTAAAT 953

||||| ||||| ||||| ||||| |||||

2 TCGTCATAGGGTTAAAT 17

RESULT 322

ADC04259

ADC04259 standard; DNA; 17 BP.

ADC04259;

18-DEC-2003 (first entry)

Human Na/H exchanger-like protein 1 gene oligonucleotide #706.

ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein; NHELP1; passive replacement therapy; vaccine; diagnosis.

Homo sapiens.

EP1273660-A2.

08-JAN-2003.

25-JAN-2002; 2002EP-00001160.

30-JAN-2001; 2001WO-US000666.

23-MAY-2001; 2001US-00864761.

21-DEC-2001; 2001US-0343331P.

(AEOM-) AEOMICA INC.

Gu Y;

WPI; 2003-302724/30.

New human sodium-hydrogen exchanger like protein 1 (NHELP1), useful as a passive replacement therapy or as a vaccine for treating or preventing disorders associated with aberrant expression or activity of human NHELP1.

Example 2; SEQ ID NO 746; 468pp; English.

The invention relates to a nucleic acid molecule which encodes a Na+/H+ exchanger like protein (NHELP1). The NHELP1 nucleic acid molecule, NHELP1 polypeptide, an antibody against the protein or its antigen-binding fragment is useful in therapy. The NHELP1 nucleic acid molecule, NHELP1 polypeptide and an agonist are particularly useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHELP1. The antibody or its antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with increased expression or activity of human NHELP1. The NHELP1 nucleic acid or protein is useful as passive replacement therapy, as a vaccine, or in diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide spanning the sequence of the human NHELP1 gene (ADC03514).

Sequence 17 BP; 2 A; 5 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

901 CTGGTCATTTTCTTTG 916

||||| ||||| ||||| |||||

2 CTGGCCATTTTCCATG 17

RESULT 323

ADC04001

ADC04001 standard; DNA; 17 BP.

AC ADC04001;

DT 18-DEC-2003 (first entry)

DE Human Na/H exchanger-like protein 1 gene oligonucleotide #448.

ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein; NHELP1; passive replacement therapy; vaccine; diagnosis.

OS Homo sapiens.

PN EP1273660-A2.

XX 08-JAN-2003.

XX 25-JAN-2002; 2002EP-00001160.

XX 30-JAN-2001; 2001WO-US000666.

XX 23-MAY-2001; 2001US-00864761.

XX 21-DEC-2001; 2001US-0343331P.

XX (AEOM-) AEOMICA INC.

XX Gu Y;

XX WPI; 2003-302724/30.

New human sodium-hydrogen exchanger like protein 1 (NHELP1), useful as a passive replacement therapy or as a vaccine for treating or preventing disorders associated with aberrant expression or activity of human NHELP1.

Example 2; SEQ ID NO 488; 468pp; English.

The invention relates to a nucleic acid molecule which encodes a Na+/H+ exchanger like protein (NHELP1). The NHELP1 nucleic acid molecule, NHELP1 polypeptide, an antibody against the protein or its antigen-binding fragment is useful in therapy. The NHELP1 nucleic acid molecule, NHELP1 polypeptide and an agonist are particularly useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHELP1. The antibody or its antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with increased expression or activity of human NHELP1. The NHELP1 nucleic acid or protein is useful as passive replacement therapy, as a vaccine, or in diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide spanning the sequence of the human NHELP1 gene (ADC03514).

Sequence 17 BP; 3 A; 4 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02; Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

936 CCTTCATATGTTTAA 951

||||| ||||| ||||| |||||

1 CTTCATCATGTTTAA 16

RESULT 324

ADB45052/c

ID ADB45052 standard; DNA; 17 BP.  
XX  
AC ADB45052;  
XX  
DT 18-DEC-2003 (first entry)  
XX  
DE Tumour suppression/reversion associated nucleotide #5375.  
XX  
KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;  
KW primer; probe; tumour suppression; tumour reversion; apoptosis;  
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;  
KW diagnosis.  
XX  
XX Homo sapiens.  
OS  
XX WO2003040369-A2.  
PN  
XX  
XX 15-MAY-2003.  
PD  
XX 17-SEP-2002; 2002WO-IB004219.  
PF  
XX 17-SEP-2001; 2001FR-00011981.  
PR  
XX (MOLE-) MOLECULAR ENGINES LAB.  
PA  
XX Telerman A, Amson R, Tuijnder M;  
XX  
XX WPI; 2003-441574/41.  
DR  
XX New nucleic acid encoding human prostate membrane-specific antigen,  
XX useful e.g. for treatment of tumors and viral infection, also related  
XX polypeptide and antibodies.  
XX  
XX Disclosure; Page 660; 771pp; French.  
XX  
XX The invention relates to the isolation of 6327 nucleotide sequences,  
XX fragments of at least 15 consecutive nucleotides of these nucleotides, a  
XX sequence having at least 80% identity, after optimal alignment, with the  
XX nucleotides, a sequence that hybridizes under stringent conditions with  
XX the nucleotides, or the complement, or corresponding RNA, of the  
XX nucleotides. The nucleotides are used as probes or primers for detecting,  
XX identifying, quantifying and/or amplifying nucleic acids, as in vitro  
XX sense and antisense sequences, of nucleotides involved in tumour  
XX suppression or reversion, apoptosis and or viral resistance, to produce  
XX recombinant polypeptides, and to prepare transgenic animals, as  
XX experimental models. The nucleotides (also vectors containing them and  
XX cells containing the vectors), the encoded polypeptides and antibodies  
XX (Ab) against the polypeptide are useful for prevention and/or treatment  
XX of viral infections or diseases characterized by development of tumours  
XX or cell degeneration (e.g. Alzheimer's disease or schizophrenia).  
XX Analysis of the expression of the nucleotides can be used for diagnosis  
XX and/or prognosis of these diseases. The nucleotides and polypeptides can  
XX also be used to screen for their specific interactive molecules,  
XX potentially useful for treating diseases associated with abnormal  
XX expression of the nucleotides.  
XX  
XX Sequence 17 BP; 8 A; 3 C; 1 G; 5 T; 0 U; 0 Other;  
SQ

Query Match 15.3%; Score 11.2; DB 1; Length 17;  
Best Local Similarity 81.2%; Pred. No. 7.9e+02;  
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
CY 943 ATTGGTTTAATGGATC 958  
||| ||||| |||||  
DB 16 ATTTATTTAATGGATC 1

RESULT 325  
AAA06763  
ID AAA06763 standard; DNA; 12 BP.  
XX  
XX AAA06763;  
XX

DT 05-JUN-2000 (first entry)  
XX  
DE VEGF derived short antisense oligonucleotide SEQ ID NO:72.  
XX  
KW Human; vascular endothelial growth factor; VEGF; phosphorothioate;  
KW antisense oligonucleotide; inhibition; cytostatic; angiogenic;  
KW gene therapy; abnormal vascular permeability; cell proliferation;  
KW cell permeation; angiogenesis; neovascularisation; tumour cell growth;  
KW metastasis; ss.  
XX  
XX Homo sapiens.  
OS  
XX Synthetic.  
PN EP979869-A1.  
XX  
XX 16-FEB-2000.  
PD  
XX 07-AUG-1998; 98EP-00114853.  
PF  
XX 07-AUG-1998; 98EP-00114853.  
PR  
XX (HMRI ) HOECHST MARION ROUSSEL DEUT GMBH.  
PA  
XX Uhlmann E, Peyman A, Bitonti AJ, Woessner RD;  
XX WPI; 2000-258586/23.  
DR  
XX Novel oligonucleotides corresponding to a part of a vascular endothelial  
XX growth factor, useful for treating e.g. tumor cell growth and/or  
XX metastasis.  
XX  
XX Example 1; Page 17; 73pp; English.  
XX  
XX The present invention describes oligonucleotides (I) of 10-15 residues  
XX corresponding to a part of a vascular endothelial growth factor (VEGF)  
XX comprising 1 of 6 sequences given in AAA06692 to AAA06697. AAA06698 to  
XX AAA06783 represent VEGF antisense oligonucleotides used in the  
XX exemplification of the present invention. The antisense oligonucleotides  
XX can contain phosphorothioate linkages. Oligonucleotides from the present  
XX invention have cytostatic and angiogenic activities, and can be used in  
XX gene therapy. The oligonucleotides are useful for inhibiting the  
XX expression of VEGF, e.g. for the treatment of diseases associated with  
XX abnormal vascular permeability, cell proliferation, cell permeation,  
XX angiogenesis, neovascularisation, tumour cell growth and/or metastasis.  
XX AAA06784 represents a human VEGF nucleotide sequence from which the  
XX oligonucleotides are derived  
XX  
XX Sequence 12 BP; 0 A; 3 C; 2 G; 7 T; 0 U; 0 Other;  
SQ

Query Match 15.1%; Score 11; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 6.8e+02;  
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
CY 909 TTCTCTTGGTC 919  
||||| |||||  
DB 2 TTCTCTTGGTC 12

RESULT 326  
ABH91814  
ID ABH91814 standard; DNA; 12 BP.  
XX  
XX ABH91814;  
XX  
XX 22-FEB-2002 (first entry)  
DT  
XX  
DE Oligonucleotide primer SEQ ID NO 291807 for detecting SNP TSC0014939.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
OS

WO200177384-A2.  
18-OCT-2001.  
06-APR-2001; 2001WO-IB0000713.  
07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
Claim 1; SEQ ID NO 291807; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABH00010-ABH99989 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
Sequence 12 BP; 2 A; 5 C; 0 G; 5 T; 0 U; 0 Other;  
Query Match 15.1%; Score 11; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 6.8e+02;  
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
928 TTATCCCTCCT 938  
|||||  
2 TTATCCCTCCT 12  
RESULT 327  
H75494/C  
ABH75494 standard; DNA; 12 BP.  
ABH75494;  
22-FEB-2002 (first entry)  
Oligonucleotide primer SEQ ID NO 275485 for detecting SNP TSC0003907.  
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.  
Homo sapiens.  
WO200177384-A2.  
18-OCT-2001.  
06-APR-2001; 2001WO-IB0000713.  
07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;

DR WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
PT Claim 1; SEQ ID NO 275485; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABH00010-ABH99989 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
XX Sequence 12 BP; 7 A; 3 C; 0 G; 2 T; 0 U; 0 Other;  
SQ Query Match 15.1%; Score 11; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 6.8e+02;  
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 945 TCGTTTAAATGT 955  
|||||  
12 TCGTTTAAATGT 2  
Db  
RESULT 328  
ABI08662  
ID ABI08662 standard; DNA; 12 BP.  
XX AC ABI08662;  
XX DT 22-FEB-2002 (first entry)  
XX DE Oligonucleotide primer SEQ ID NO 308635 for detecting SNP TSC0023137.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX OS Homo sapiens.  
XX PN WO200177384-A2.  
XX PD 18-OCT-2001.  
XX PF 06-APR-2001; 2001WO-IB0000713.  
XX PR 07-APR-2000; 2000DE-01019173.  
XX PA (EPIG-) EPIGENOMICS AG.  
XX PI Olek A, Piepenbrock C, Berlin K;  
XX DR WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
PT Claim 1; SEQ ID NO 308635; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABH00010-ABH99989 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 CC  
 XX Sequence 12 BP; 1 A; 6 C; 1 G; 4 T; 0 U; 0 Other;  
 SQ  
 Query Match 15.1%; Score 11; DB 1; Length 12;  
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;  
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 930 ATCCCTCCTCT 940  
 Db 2 ATCCCTCCTCT 12  
 |||||  
 |||||  
 RESULT 329  
 ABH71304  
 ID ABH71304 standard; DNA; 12 BP.  
 AC  
 AC ABH71304;  
 XX  
 DT 22-FEB-2002 (first entry)  
 XX  
 XX Oligonucleotide primer SEQ ID NO 271281 for detecting SNP TSC0002451.  
 DE  
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO200177384-A2.  
 EN  
 XX 18-OCT-2001.  
 PD  
 PD 06-APR-2001; 2001WO-IB000713.  
 PF  
 PF 07-APR-2000; 2000DE-01019173.  
 XX  
 XX (EPIG-) EPIGENOMICS AG.  
 PA  
 PA Olek A, Piepenbrock C, Berlin K;  
 FI  
 FI WPI; 2001-657177/75.  
 DR  
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 XX Claim 1; SEQ ID NO 271281; 29pp + Sequence Listing; German.  
 XX  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 CC  
 XX Sequence 12 BP; 2 A; 0 C; 4 G; 6 T; 0 U; 0 Other;  
 SQ  
 Query Match 15.1%; Score 11; DB 1; Length 12;  
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;  
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 930 ATCCCTCCTCT 940  
 Db 2 ATCCCTCCTCT 12  
 |||||  
 |||||  
 RESULT 331  
 ABH71304  
 ID ABH71304 standard; DNA; 12 BP.  
 AC  
 AC ABH71304;  
 XX  
 DT 22-FEB-2002 (first entry)  
 XX  
 XX Oligonucleotide primer SEQ ID NO 271281 for detecting SNP TSC0002451.  
 DE  
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO200177384-A2.  
 EN  
 XX 18-OCT-2001.  
 PD  
 PD 06-APR-2001; 2001WO-IB000713.  
 PF  
 PF 07-APR-2000; 2000DE-01019173.  
 XX  
 XX (EPIG-) EPIGENOMICS AG.  
 PA  
 PA Olek A, Piepenbrock C, Berlin K;  
 FI  
 FI WPI; 2001-657177/75.  
 DR  
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 XX Claim 1; SEQ ID NO 271281; 29pp + Sequence Listing; German.  
 XX  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 CC  
 XX Sequence 12 BP; 2 A; 0 C; 4 G; 6 T; 0 U; 0 Other;  
 SQ  
 Query Match 15.1%; Score 11; DB 1; Length 12;  
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;  
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 944 TTGGTTTAATG 954  
 Db 2 TTGGTTTAATG 12  
 |||||  
 |||||  
 RESULT 330  
 ABI61761/C  
 ID ABI61761 standard; DNA; 12 BP.  
 XX  
 AC ABI61761;  
 XX  
 XX 22-FEB-2002 (first entry)  
 DT  
 DT Oligonucleotide primer SEQ ID NO 361734 for detecting SNP TSC0052796.  
 DE  
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO200177384-A2.  
 EN  
 XX 18-OCT-2001.  
 PD  
 PD 06-APR-2001; 2001WO-IB000713.  
 PF  
 PF 07-APR-2000; 2000DE-01019173.  
 XX  
 XX (EPIG-) EPIGENOMICS AG.  
 PA  
 PA Olek A, Piepenbrock C, Berlin K;  
 FI  
 FI WPI; 2001-657177/75.  
 DR  
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 XX Claim 1; SEQ ID NO 361734; 29pp + Sequence Listing; German.  
 XX  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 CC  
 XX Sequence 12 BP; 6 A; 2 C; 0 G; 4 T; 0 U; 0 Other;  
 SQ  
 Query Match 15.1%; Score 11; DB 1; Length 12;  
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;  
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 943 ATTGGTTTAAT 953  
 Db 12 ATTGGTTTAAT 2  
 |||||  
 |||||  
 RESULT 331  
 ABI63498  
 ID ABI63498 standard; DNA; 12 BP.  
 XX  
 AC ABI63498;  
 XX  
 DT 22-FEB-2002 (first entry)

```
1 Oligonucleotide primer SEQ ID NO 363471 for detecting SNP TSC0053873.
2
3 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
4 Peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
5 central nervous system; gastrointestinal; respiratory; immune; metabolic.
6
7 Homo sapiens.
8
9 WO200177384-A2.
10
11 18-OCT-2001.
12
13 06-APR-2001; 2001WO-IB000713.
14
15 07-APR-2000; 2000DE-01019173.
16
17 (EPIG-) EPIGENOMICS AG.
18
19 Olek A, Piepenbrock C, Berlin K;
20
21 WPI; 2001-657177/75.
22
23 Set of oligonucleotides, useful for diagnosis and cell typing, is
24 designed to detect single-nucleotide polymorphisms and cytosine
25 methylation status.
26
27 Claim 1; SEQ ID NO 363471; 29pp + Sequence Listing; German.
28
29 This invention describes novel oligonucleotide primers or peptide nucleic
30 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
31 and cytosine methylation status in chemically pretreated genomic DNA. The
32 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
33 range of diseases including immune system, gastrointestinal, respiratory,
34 central nervous system, cardiovascular and metabolic disorders. The
35 oligomers are also used for detecting cell type differentiation. ABC00010
36 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
37 represent the oligomers described in the invention. NOTE: The sequence
38 data for this patent did not form part of the printed specification, but
39 was obtained in electronic format from WIPO at
40 ftp.wipo.int/pub/published_pct_sequences
41
42 Sequence 12 BP; 1 A; 6 C; 0 G; 5 T; 0 U; 0 Other;
43
44 This invention describes novel oligonucleotide primers or peptide nucleic
45 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
46 and cytosine methylation status in chemically pretreated genomic DNA. The
47 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
48 range of diseases including immune system, gastrointestinal, respiratory,
49 central nervous system, cardiovascular and metabolic disorders. The
50 oligomers are also used for detecting cell type differentiation. ABC00010
51 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
52 represent the oligomers described in the invention. NOTE: The sequence
53 data for this patent did not form part of the printed specification, but
54 was obtained in electronic format from WIPO at
55 ftp.wipo.int/pub/published_pct_sequences
56
57 Sequence 12 BP; 1 A; 6 C; 0 G; 5 T; 0 U; 0 Other;
58
59 Query Match 15.1%; Score 11; DB 1; Length 12;
60 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
61 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
62
63 931 TCCCTCCCTCTT 941
64 |||||
65 1 TCCCTCCCTCTT 11
66
67 SULT 332
68 IS1405/C
69 ABI51405 standard; DNA; 12 BP.
70
71 ABI51405;
72
73 22-FEB-2002 (first entry)
74
75 Oligonucleotide primer SEQ ID NO 351378 for detecting SNP TSC0047263.
76
77 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
78 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
79 central nervous system; gastrointestinal; respiratory; immune; metabolic.
80
81 Homo sapiens.
82
83 WO200177384-A2.
84
85 18-OCT-2001.
86
87 06-APR-2001; 2001WO-IB000713.
88
89 07-APR-2000; 2000DE-01019173.
90
91 (EPIG-) EPIGENOMICS AG.
92
93 Olek A, Piepenbrock C, Berlin K;
94
95 WPI; 2001-657177/75.
96
97 Set of oligonucleotides, useful for diagnosis and cell typing, is
98 designed to detect single-nucleotide polymorphisms and cytosine
99 methylation status.
100
101 Claim 1; SEQ ID NO 363471; 29pp + Sequence Listing; German.
102
103 This invention describes novel oligonucleotide primers or peptide nucleic
104 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
105 and cytosine methylation status in chemically pretreated genomic DNA. The
106 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
107 range of diseases including immune system, gastrointestinal, respiratory,
108 central nervous system, cardiovascular and metabolic disorders. The
109 oligomers are also used for detecting cell type differentiation. ABC00010
110 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
111 represent the oligomers described in the invention. NOTE: The sequence
112 data for this patent did not form part of the printed specification, but
113 was obtained in electronic format from WIPO at
114 ftp.wipo.int/pub/published_pct_sequences
115
116 Sequence 12 BP; 1 A; 6 C; 0 G; 5 T; 0 U; 0 Other;
117
118 Query Match 15.1%; Score 11; DB 1; Length 12;
119 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
120 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
121
122 931 TCCCTCCCTCTT 941
123 |||||
124 1 TCCCTCCCTCTT 11
125
126 SULT 332
127 IS1405/C
128 ABI51405 standard; DNA; 12 BP.
129
130 ABI51405;
131
132 22-FEB-2002 (first entry)
133
134 Oligonucleotide primer SEQ ID NO 351378 for detecting SNP TSC0058884.
135
136 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
137 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
138 central nervous system; gastrointestinal; respiratory; immune; metabolic.
139
140 Homo sapiens.
141
142 WO200177384-A2.
143
144 18-OCT-2001.
145
146 06-APR-2001; 2001WO-IB000713.
147
148 07-APR-2000; 2000DE-01019173.
149
150 (EPIG-) EPIGENOMICS AG.
151
152 Olek A, Piepenbrock C, Berlin K;
153
154 WPI; 2001-657177/75.
155
156 Set of oligonucleotides, useful for diagnosis and cell typing, is
157 designed to detect single-nucleotide polymorphisms and cytosine
158 methylation status.
```

```
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
PA
XX Olek A, Piepenbrock C, Berlin K;
PI
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 351378; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 12 BP; 8 A; 0 C; 3 G; 1 T; 0 U; 0 Other;
SQ
Query Match 15.1%; Score 11; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 905 TCATTTTCCTT 915
DB 12 TCATTTTCCTT 2
|||
RESULT 333
ABI71629/C
ID ABI71629 standard; DNA; 12 BP.
XX
XX AC ABI71629;
XX
XX DT 22-FEB-2002 (first entry)
XX
XX DE Oligonucleotide primer SEQ ID NO 371602 for detecting SNP TSC0058884.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.
XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
```









```
Query Match          15.1%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

    947 GTTAAATGAT 957
    |||||
    1 GTTAAATGAT 11

.SULT 341
H16022
ABH16022 standard; DNA; 13 BP.
ABH16022;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 215999 for detecting SNP TSC0052522.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 215999; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;

This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;

Query Match          15.1%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

    943 ATTGGTTTAAT 953
    |||||
    1 ATTGGTTTAAT 11

.SULT 342
H12113/C
ABH12113 standard; DNA; 13 BP.

Query Match          15.1%; Score 11; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 7.2e+02;
Matches 11; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 943 ATTGGTTTAATCT 955
DB 13 ATTGGTTTATGY 1

RESULT 343
ABF84807/C
ID ABF84807 standard; DNA; 13 BP.
XX
AC ABF84807;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 184804 for detecting SNP TSC0045589.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
```

XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX  
XX Claim 1; SEQ ID NO 184804; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX Sequence 13 BP; 6 A; 3 C; 0 G; 3 T; 0 U; 1 Other;  
XX  
XX Query Match 15.1%; Score 11; DB 1; Length 13;  
XX Best Local Similarity 100.0%; Pred. No. 7.2e+02;  
XX Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX Q/ 947 GTTTAATGTAT 957  
XX Db 13 GTTTAATGTAT 3  
XX  
XX RESULT 344  
XX ABC72133  
XX ID ABC72133 standard; DNA; 13 BP.  
XX AC  
XX ABC72133;  
XX  
XX 21-FEB-2002 (first entry)  
XX  
XX Oligonucleotide SEQ ID NO 72150 for detecting SNP TSC0018645.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX

PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
XX Claim 1; SEQ ID NO 72150; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX Sequence 13 BP; 2 A; 6 C; 0 G; 4 T; 0 U; 1 Other;  
XX  
XX Query Match 15.1%; Score 11; DB 1; Length 13;  
XX Best Local Similarity 100.0%; Pred. No. 7.2e+02;  
XX Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX Q/ 930 ATCCCTCCTCT 940  
XX Db 3 ATCCCTCCTCT 13  
XX  
XX RESULT 345  
XX ABF71906  
XX ID ABF71906 standard; DNA; 13 BP.  
XX AC  
XX ABF71906;  
XX  
XX 22-FEB-2002 (first entry)  
XX  
XX Oligonucleotide SEQ ID NO 171903 for detecting SNP TSC0042851.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX  
XX Claim 1; SEQ ID NO 171903; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences  
XX

```
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 4 A; 0 C; 3 G; 5 T; 0 U; 1 Other;

Query Match          15.1%; Score 11; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 7.2e+02;
Matches 11; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

943 ATGCTTTAATGT 955
|||||
1 ATAGCTTAATGY 13

RESULT 346
ABH77164
ABF77164 standard; DNA; 13 BP.
ABF77164;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 177161 for detecting SNP TSC0009928.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 177161; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 0 C; 3 G; 6 T; 0 U; 1 Other;

Query Match          15.1%; Score 11; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 7.2e+02;
Matches 11; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

948 TTTAATGTATCG 960
```

```
Db          1 TTTAATGTATGY 13
|||||
RESULT 347
ABH47707/C
ABH47707 standard; DNA; 13 BP.
ABH47707;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 247684 for detecting SNP TSC00060535.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 247684; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

Query Match          15.1%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY          945 TCGTTTAATGT 955
|||||
Db          11 TCGTTTAATGT 1

RESULT 348
ABC93440
ABC93440 standard; DNA; 13 BP.
ABC93440;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 93457 for detecting SNP TSC0023347.
```



This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 2 A; 0 C; 3 G; 7 T; 0 U; 1 Other;

Query Match 15.1%; Score 11; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 7.2e+02;  
Matches 11; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

943 ATTGGTTTAATGT 955  
|||||||  
1 ATTGGTTTATGT 13

RESULT 351  
IF48209/c  
ABF48209 standard; DNA; 13 BP.  
ABF48209;  
21-FEB-2002 (first entry)  
Oligonucleotide SEQ ID NO 148206 for detecting SNP TSC0037419.  
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.  
Homo sapiens.  
WO200177384-A2.  
18-OCT-2001.  
06-APR-2001; 2001WO-IB000713.  
07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
Claim 1; SEQ ID NO 148206; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX  
SQ Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;  
Query Match 15.1%; Score 11; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 7.2e+02;  
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 947 GTTTAATGTAT 957  
|||||||  
13 GTTTAATGTAT 3

Db

RESULT 352  
ABH47706  
ID ABH47706 standard; DNA; 13 BP.  
XX  
AC ABH47706;  
XX  
DT 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 247683 for detecting SNP TSC0060535.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
PN WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
XX  
PS Claim 1; SEQ ID NO 247683; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;  
Query Match 15.1%; Score 11; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 7.2e+02;  
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 945 TGGTTTAATGT 955  
|||||||  
3 TGGTTTAATGT 13

Db

RESULT 353



WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 197139; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 15.1%; Score 11; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 7.2e+02;  
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

944 TTGGTTTAATG 954  
|||||  
2 TTGGTTTAATG 12

SULT 356  
F43208  
ABF48208 standard; DNA; 13 BP.

ABF48208;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 148205 for detecting SNP TSC0037419.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 148205; 29pp + Sequence Listing; German.

range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 15.1%; Score 11; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 7.2e+02;  
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

947 GTTTAATGTAT 957  
|||||  
1 GTTTAATGTAT 11

RESULT 357  
ABF78023/c

ID ABF78023 standard; DNA; 13 BP.

XX AC ABF78023;

DT 22-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 178020 for detecting SNP TSC0044112.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 178020; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 6 A; 2 C; 0 G; 4 T; 0 U; 1 Other;

Query Match 15.1%; Score 11; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 7.2e+02;



```

Matches 11; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 948 TTTAATGTAATGCG 960
Db 13 TTTAATGTAATAGY 1

RESULT 358
ABH16023/c
ID ABH16023 standard; DNA; 13 BP.
XX AC ABH16023;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 216000 for detecting SNP TSC0052522.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX PS WPI; 2001-657177/75.
XX CC Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX CC Claim 1; SEQ ID NO 216000; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABJ00010-ABJ82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX CC
SQ Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 15.1%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 943 ATTGGTTTAAT 953
Db 13 ATTGGTTTAAT 3

RESULT 359
AAF48242
ID AAF48242 standard; DNA; 15 BP.
XX AC AAF48242;
XX DT 30-MAR-2001 (first entry)
XX DE IGFBP3 oligonucleotide #1657.
XX

```

```

DT 30-MAR-2001 (first entry)
XX IGFBP3 oligonucleotide #1662.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
XX KW neovascular condition of the retina; ss.
XX OS Homo sapiens.
XX PN WO200078341-A1.
XX PD 28-DEC-2000.
XX PF 21-JUN-2000; 2000WO-AU000693.
XX PR 21-JUN-1999; 99US-0140345P.
XX PA (MURD-) MURDOCH CHILDRENS RES INST.
XX PI Wraight CJ, Werther GA, Edmondson SR;
XX PS WPI; 2001-041421/05.
XX CC Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX CC
XX PS Example 7; Page 55; 201pp; English.
XX CC
XX CC The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX CC
SQ Sequence 15 BP; 3 A; 6 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 15.1%; Score 11; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 933 CCTCCTCTTCA 943
Db 1 CCTCCTCTTCA 11

RESULT 360
AAF48237
ID AAF48237 standard; DNA; 15 BP.
XX AC AAF48237;
XX DT 30-MAR-2001 (first entry)
XX DE IGFBP3 oligonucleotide #1657.
XX

```

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 7; Page 55; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 0 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 15.1%; Score 11; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 7.9e+02;  
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

932 CCCTCTCTTC 942

|||||  
5 CCCTCTCTTC 15

RESULT 361

AS95645/c

AAS95645 standard; DNA; 15 BP.

AAS95645;

14-FEB-2002 (first entry)

Human NPYLR gene allele-specific oligonucleotide sequencing primer #6.

Human; neuropeptide Y receptor Y1; NPYLR; ss; antiarteriosclerotic; haplotyping; haplotype pair; single nucleotide polymorphism; genotyping; gene therapy; drug screening; cardiovascular disease; antidepressant; hypertension; cardiant; depression; probe; sequencing primer; PCR primer;

KW PCR primer universal tail.

XX Homo sapiens.

OS WO200185742-A2.

FN 15-NOV-2001.

XX 07-MAY-2001; 2001WO-US014773.

XX 05-MAY-2000; 2000US-0201950P.

XX (GENA-) GENAISSANCE PHARM INC.

XX Choi JY, Kliehm SE, Koshy B, Lee HH;

XX WPI; 2002-055579/07.

DR New isolated polynucleotide variant of neuropeptide Y receptor Y1 (NPYLR) for studying the function of NPYLR, and expressing NPYLR protein for use in screening candidate drugs to treat NPYLR-related diseases.

XX Claim 15; Page 12; 48pp; English.

The invention relates to single nucleotide polymorphisms in the human neuropeptide Y receptor Y1 (NPYLR) gene. A method for haplotyping the NPYLR gene in an individual comprises identifying the nucleotide at one or more polymorphic sites and determining whether one of the copies of the gene is defined by one of the NPYLR haplotypes given in the specification or whether both copies are defined by a haplotype pair. This method is useful in genotyping, whereby all possible haplotype pairs can be assigned to specific genotypes. An association between a trait and a haplotype or haplotype pair of the NPYLR gene can be identified by comparing the frequency of the haplotype or haplotype pair in a population exhibiting the trait with the frequency of the haplotype or haplotype pair in a reference population, where a higher haplotype frequency in the trait population indicates the trait is associated with the haplotype or haplotype pair. NPYLR and its corresponding DNA are used for studying the expression and function of NPYLR, for use in screening for candidate drugs to treat diseases related to NPYLR activity, such as cardiovascular diseases (e.g. hypertension) and depression. The sequences are also useful for studying the effect of variation on the biological activity of NPYLR as well as on the binding affinity of candidate drugs targeting NPYLR. Sequences AAS95637-AAS95659 represent allele-specific oligonucleotide probes, sequencing primers, PCR primers and PCR primer universal tails used to detect NPYLR gene polymorphisms

XX Sequence 15 BP; 7 A; 1 C; 6 G; 0 T; 0 U; 1 Other;

Query Match 15.1%; Score 11; DB 1; Length 15;

Best Local Similarity 100.0%; Pred. No. 7.9e+02;

Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 918 TCTTGCCTTT 928

|||||  
13 TCTTGCCTTT 3

RESULT 362

ABK81922/c

ID ABK81922 standard; DNA; 15 BP.

XX ABK81922;

XX 13-AUG-2002 (first entry)

XX Human CYP27A1 gene polymorphism detection ASO primer #20.

XX Human; Cytochrome P450; Subfamily XXVIIA; single nucleotide polymorphism; Steroid 27-Hydroxylase; Cerebrotendinous Xanthomatosis Polypeptide 1; CYP27A1; SNP; drug screening; cerebrotendinous xanthomatosis; allele specific oligonucleotide; ASO; primer; ss.

XX

OS Homo sapiens.  
 XX W0200230952-A2.  
 XX 18-APR-2002.  
 XX 15-OCT-2001; 2001WO-US042727.  
 XX 13-OCT-2000; 2000US-0239942P.  
 XX (GENA-) GENAISSANCE PHARM INC.  
 XX Anastasio AE, Chew A, Han J, Sanchis A;  
 XX WPI; 2002-435436/46.  
 XX Novel isolated human Cytochrome P450, Subfamily XXVIIA, Steroid 27-Hydroxylase, Cerebrotendinous Xanthomatosis 1 gene, useful for therapeutic purposes, and for studying expression and function of the gene.  
 XX Claim 14; Page 14; 90pp; English.  
 XX The present invention relates to a new human Cytochrome P450, Subfamily XXVIIA, (Steroid 27-Hydroxylase, Cerebrotendinous Xanthomatosis) Polypeptide 1 (CYP27A1) polynucleotide. The polynucleotide of the invention comprises a sequence which is a polymorphic variant for a reference sequence for the CYP27A1 gene or its fragment, or a polymorphic variant of a reference sequence for a CYP27A1 cDNA or its fragment. The invention is useful for screening for drugs by contacting the CYP27A1 polymorphic variant with a candidate agent and assaying for binding activity. The invention is also useful in studying the expression and function of CYP27A1, and in expressing CYP27A1 protein for use in screening for candidate drugs to treat diseases related to CYP27A1 activity, e.g. cerebrotendinous xanthomatosis. Other uses include for therapeutic purposes and for studying expression of the CYP27A1 isogenes in vivo, for in vivo screening and testing of drugs targeted against CYP27A1 protein, and for testing the efficacy of therapeutic agents and compounds for diseases associated with CYP27A1 activity, e.g. cerebrotendinous xanthomatosis, in a biological system. The invention is useful for studying the effect of the variation on the biological activity of CYP27A1 as well as on the binding affinity of candidate drugs targeting CYP27A1 for the treatment of cerebrotendinous xanthomatosis. The present nucleic acid sequence represents one of a collection (ABK81903-ABK81930) of allele specific oligonucleotide (ASO) primers that were used in the invention to detect polymorphisms in the human CYP27A1 gene.  
 XX Sequence 15 BP; 5 A; 0 C; 6 G; 3 T; 0 U; 1 Other;  
 Query Match 15.1%; Score 11; DB 1; Length 15;  
 Best Local Similarity 84.6%; Pred. No. 7.9e+02;  
 Matches 11; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
 QY 924 CCTTTATCCCTC 936  
 :|| |||||  
 Db 14 YCTATTATCCCTC 2  
 RESULT 363  
 AAQ68033  
 ID AAQ68033 standard; DNA; 16 BP.  
 XX AC AAQ68033;  
 XX 25-MAR-2003 (revised)  
 XX 16-DEC-1994 (first entry)  
 XX Probe for HCV genotyping (HCV 2, subtype 2c).  
 XX Hepatitis C virus; HCV; probe; genotyping; hybridisation;  
 XX non-A, non-B hepatitis; NANBH; ss.

OS Synthetic.  
 XX W09412670-A2.  
 XX 09-JUN-1994.  
 XX 26-NOV-1993; 93WO-EP003325.  
 XX 27-NOV-1992; 92EP-00403222.  
 XX 31-AUG-1993; 93EP-00402129.  
 XX (INNO-) INNOGENETICS NV SA.  
 XX Maertens G, Stuyver L, Rossau R, Van Heuverswyn H;  
 XX WPI; 1994-200296/24.  
 XX Process for genotyping Hepatitis C virus (HCV) isolates - utilises probes hybridising to HCV isolate domains.  
 XX Claim 6; Page 67; 96pp; English.  
 XX Genotyping HCV utilises probes hybridising to HCV isolate domains. HCV types 2, 3, 4, 5 or 6 and subtypes 1a, 1b, 2a, 2b, 3a, 3b, 3c, 4a, 4b, 4c, 4d, 4e, 4f, 4g and 4h can be typed. (Updated on 25-MAR-2003 to correct PN field.)  
 XX Sequence 16 BP; 1 A; 3 C; 6 G; 6 T; 0 U; 0 Other;  
 Query Match 15.1%; Score 11; DB 1; Length 16;  
 Best Local Similarity 100.0%; Pred. No. 8.2e+02;  
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 900 CCTGGTCATTT 910  
 :||| |||||  
 Db 3 CCTGGTCATTT 13  
 RESULT 364  
 AAQ10578  
 ID AAQ10578 standard; DNA; 14 BP.  
 XX AC AAQ10578;  
 XX 10-MAY-1991 (first entry)  
 XX Probe for detecting human factor IX encoding plasmid clone.  
 XX Human factor IX; genetic deficiencies; blood clotting disorders;  
 XX haemophilia B; ss.  
 XX Homo sapiens.  
 XX US4994371-A.  
 XX 19-FEB-1991.  
 XX 19-MAY-1989; 89US-00355900.  
 XX 16-MAY-1985; 85US-00735702.  
 XX 18-JUL-1986; 86US-00888041.  
 XX 28-AUG-1987; 87US-00094031.  
 XX (DAVI/) DAVIE E W.  
 XX Davie EW, Kurachi K;  
 XX WPI; 1991-072901/10.  
 XX DNA coding for human factor IX - used for producing polypeptide and detecting genetic modifications in diagnosing blood clotting deficiencies.

Disclosure; Page 7; 12pp; English.

This probe is used to screen a human liver cDNA library for the presence of a clone (pHFX1) contg. the coding information for human factor IX. The recombinant DNA clone is useful for detecting mutations or other genetic deficiencies concerned with factor IX. It can also be used to diagnose blood clotting deficiencies e.g. haemophilia B. The use of recombinant DNA methods results in the large scale expression of hFIX polypeptides. See also AAQ10577 and AAQ10579

Sequence 14 BP; 2 A; 3 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 14.8%; Score 10.8; DB 1; Length 14;  
Best Local Similarity 85.7%; Pred. No. 8.1e+02;  
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

918 TCTTTGCTTTTAT 931  
1 TATTTGCTTTTCAT 14

RESULT 365  
AAV65725  
AAV65725 standard; DNA; 14 BP.

AAV65725;

10-DEC-1998 (first entry)

Oligonucleotide used in the course of the invention.

Werner's syndrome; diagnosis; ss.

Synthetic.

JPI0201498-A.

04-AUG-1998.

24-JAN-1997; 97JP-00011268.

24-JAN-1997; 97JP-00011268.

(EIJU-) EIJIN KENKYUSHO KK.

WPI; 1998-474499/41.

Detection of mutation in gene causing human Werner's syndrome - and oligo:nucleotide used for detection, comprises amplifying DNA and synthesising oligo:nucleotide.

Claim 7; Page 9; 17pp; Japanese.

Oligonucleotides AAV65723-25 are used in the course of the invention. The specification describes the detection of a mutation in a gene causing human Werner's syndrome. The method comprises amplifying a DNA fragment containing a mutation at position 733, 734, 1620 or 4146 of AAV65701 or at position 42 of AAV65702 and synthesising an oligonucleotide so that the base at the above site comes to be the 3' end based on the base sequence of AAV65701-02, or an oligonucleotide in which the base adjacent to the 3' end comes to be the 5' end. The oligonucleotides are hybridised with the resultant amplified fragment. The method can be used to diagnose Werner's syndrome

Sequence 14 BP; 0 A; 1 C; 1 G; 12 T; 0 U; 0 Other;

Query Match 14.8%; Score 10.8; DB 1; Length 14;  
Best Local Similarity 85.7%; Pred. No. 8.1e+02;  
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

909 TTTCTTTGCTTTT 922  
1 TTTCTTTGCTTTT 14

RESULT 366  
AAV48874  
ID AAV48874 standard; DNA; 14 BP.

AC AAV48874;

DT 15-OCT-1998 (first entry)

DE Erbb-2 gene antisense oligonucleotide Erbb-2-N-83.

KW Erbb-2; antisense oligonucleotide; modulate; gene expression; ss.

OS Synthetic.

OS Homo sapiens.

PN EP856579-A1.

PD 05-AUG-1998.

PF 31-JAN-1997; 97EP-00101531.

PR 31-JAN-1997; 97EP-00101531.

PA (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.

PI Schlingensiepen K, Brysch W;

DR WPI; 1998-400910/35.

PT Preparation of antisense oligo:nucleotide(s) which lack long runs of consecutive guanosine or inosine - and have specific ratio of residues able to form two or three hydrogen bonds, have greater activity and reduced toxicity, used therapeutically or to modulate growth of cells in culture.

Example 4; Fig 6d; 286pp; English.

AAV48709-886 represent antisense oligonucleotides directed against the Erbb-2 gene. Of these, only oligonucleotides AAV48709-91 resulted in significant reduction in Erbb-2 protein expression, while oligonucleotides AAV48792-886 had little effect. The oligonucleotides exemplify the invention. The specification describes oligonucleotides that contain 8-30 nucleotides, which contain at most 8 nucleotides that can each form three hydrogen bonds to cytosine; do not contain four consecutive nucleotides able to form three H-bonds each to four consecutive cytosines; do not contain two sequences of three consecutive nucleotides each able to form three H-bonds to three consecutive cytosines, and the ratio between residues able to form two H-bonds each (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The oligonucleotides are used to modulate expression of genes, particularly the genes for p53, Erbb-2, junB, junD, TGF-beta 1 or beta 2 to control proliferation of primary cell cultures (e.g. bone marrow stem, liver or kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The oligonucleotides can also be used to analyse function of proteins (by altering their expression or activity) and therapeutically, e.g. in cases of cancer or (targeting TGF) for stimulating the immune system

Sequence 14 BP; 1 A; 2 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 14.8%; Score 10.8; DB 1; Length 14;  
Best Local Similarity 85.7%; Pred. No. 8.1e+02;  
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

909 TTTCTTTGCTTTT 922  
1 TTTCTTTGCTTTT 14

RESULT 367  
AAQ55453/C  
ID AAQ55453 standard; DNA; 15 BP.

XX AAO55453;  
 AC  
 DT 25-MAR-2003 (revised)  
 DT 19-JUL-1994 (first entry)  
 XX  
 XX  
 DE Detection primer for cystic fibrosis mutation.  
 XX  
 XX Cystic fibrosis; CF; mutation; detection; primer extension; typing;  
 KW genotype identification; biotinylated; ss.  
 KW  
 XX Synthetic.  
 OS  
 XX WO9401447-A1.  
 PN  
 XX 20-JAN-1994.  
 PD  
 XX  
 XX 01-JUL-1993; 93WO-US006364.  
 XX  
 XX 02-JUL-1992; 92IL-00102382.  
 PR  
 XX 27-JUL-1992; 92US-00919872.  
 XX  
 XX (BRIP-) ERIPHYLE BV.  
 PA (FRIE/) FRIEDMAN M M.  
 PA  
 XX Eyal N;  
 PI  
 XX WPI; 1994-034981/04.  
 DR  
 XX  
 XX Determining identity of nucleotide base - by using primer extension  
 PT process, useful for typing of samples and genotype identification.  
 PT  
 XX Example A; Page 24; 42pp; English.  
 PS  
 XX The primers (AAQ55452-G2) are use to detect mutations within the cystic  
 CC fibrosis gene. The primers are designed to be complementary to eight of  
 CC the most common mutations within the CF gene. Detection is carried out by  
 CC the incorporation of a labelled dideoxynucleotide. Individuals carrying  
 CC the mutation incorporate a different base as opposed to normal  
 CC individuals. This primer detects the delta-507 mutation site by the  
 CC incorporation of ddATP as opposed to ddGTP. (Updated on 25-MAR-2003 to  
 CC correct PN field.)  
 XX  
 XX Sequence 15 BP; 8 A; 3 C; 3 G; 1 T; 0 U; 0 Other;  
 SQ  
 Query Match 14.8%; Score 10.8; DB 1; Length 15;  
 Best Local Similarity 85.7%; Pred. No. 8.5e+02;  
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 911 TCATTGGCTCTTGC 924  
 Db |||||  
 14 TCATTGGCTCTTC 1  
 RESULT 368  
 AAT57034/c  
 ID AAT57034 standard; RNA; 15 BP.  
 XX  
 AC AAT57034;  
 AC  
 XX 27-AUG-2003 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 24-APR-1997 (first entry)  
 XX  
 XX RSV 1C hammerhead ribozyme target sequence (nt. position 163).  
 DE  
 XX Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;  
 KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;  
 KW intercellular adhesion molecule; rel A; tumour necrosis factor;  
 KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;  
 KW translocation; chronic myelogenous leukaemia; CML; cancer;  
 KW Philadelphia chromosome; inflammation; autoimmune disease;  
 KW atherosclerosis; myocardial infarction; stroke; restenosis;

KW transplant rejection; rheumatoid arthritis; psoriasis;  
 KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;  
 KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;  
 ss.  
 XX Respiratory syncytial virus.  
 OS  
 XX WO9523225-A2.  
 PN  
 XX 31-AUG-1995.  
 PD  
 XX  
 XX 23-FEB-1995; 95WO-IB000156.  
 PF  
 XX  
 XX 23-FEB-1994; 94US-00201109.  
 PR 29-MAR-1994; 94US-00218934.  
 PR 04-APR-1994; 94US-00222795.  
 PR 07-APR-1994; 94US-00224483.  
 PR 15-APR-1994; 94US-00227958.  
 PR 15-APR-1994; 94US-00228041.  
 PR 18-MAY-1994; 94US-00245736.  
 PR 06-JUL-1994; 94US-00271280.  
 PR 15-AUG-1994; 94US-00291932.  
 PR 16-AUG-1994; 94US-00291433.  
 PR 17-AUG-1994; 94US-00292620.  
 PR 19-AUG-1994; 94US-00293520.  
 PR 02-SEP-1994; 94US-00300000.  
 PR 08-SEP-1994; 94US-00303039.  
 PR 23-SEP-1994; 94US-00311486.  
 PR 28-SEP-1994; 94US-00311749.  
 PR 03-OCT-1994; 94US-00314397.  
 PR 07-OCT-1994; 94US-00316771.  
 PR 11-OCT-1994; 94US-00319492.  
 PR 04-NOV-1994; 94US-00321993.  
 PR 10-NOV-1994; 94US-003334847.  
 PR 28-NOV-1994; 94US-00337608.  
 PR 16-DEC-1994; 94US-00345516.  
 PR 23-DEC-1994; 94US-00357577.  
 PR 30-JAN-1995; 94US-00363233.  
 PR 95US-00380734.  
 PA (RIBO-) RIBOZYME PHARM INC.  
 PA  
 XX Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudyecz LW;  
 PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, McSwiggen JA;  
 PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;  
 PI Tracz D, Usman N, Wincott FE, Woolf T;  
 XX WPI; 1995-351090/45.  
 DR  
 XX Ribozymes having modified bases and methods for producing them - for use  
 PT in inhibiting disease related genes.  
 PT  
 XX Claim 2; Page 289; 407pp; English.  
 PS  
 XX The present sequence represents a preferred target sequence for an  
 CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves mRNA coding for a  
 CC protein of respiratory syncytial virus (RSV) at the nucleotide base  
 CC position indicated in the DE line. Regions of the mRNA that do not form  
 CC secondary folding structures and that contain potential hammerhead and  
 CC hairpin ribozyme cleavage sites were identified by computer analysis.  
 CC Ribozymes directed against these mRNA sequences were designed and  
 CC synthesised with modifications that improve their nuclease resistance.  
 CC The ribozymes cleave the target sequences and can be used for treatment  
 CC and diagnosis of RSV infection. (Updated on 25-MAR-2003 to correct PI  
 CC field.) (Updated on 27-AUG-2003 to correct OS field.)  
 XX  
 XX Sequence 15 BP; 8 A; 2 C; 0 G; 0 T; 5 U; 0 Other;  
 SQ  
 Query Match 14.8%; Score 10.8; DB 1; Length 15;  
 Best Local Similarity 85.7%; Pred. No. 8.5e+02;  
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 944 TTGGTTTATGTTAT 957

|| ||| |||||  
15 TTAGTTAAATGTAT 2

RESULT 369  
JT57036/c  
AAT57036 standard; RNA; 15 BP.  
AAT57036;  
27-AUG-2003 (revised)  
25-MAR-2003 (revised)  
24-APR-1997 (first entry)  
RSV 1C hammerhead ribozyme target sequence (nt. position 164).  
Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;  
gene expression; downregulation; interleukin-5; IL-5; ICAM-1;  
intercellular adhesion molecule; rel A; tumour necrosis factor;  
TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;  
translocation; chronic myelogenous leukaemia; CML; cancer;  
Philadelphia chromosome; inflammation; autoimmune disease;  
atherosclerosis; myocardial infarction; stroke; restenosis;  
transplant rejection; rheumatoid arthritis; psoriasis;  
myocardial ischaemia; Kawasaki disease; septic shock; HIV;  
human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;  
ss.  
Respiratory syncytial virus.  
WO9523225-A2.  
31-AUG-1995.  
23-FEB-1995; 95WO-IB000156.  
23-FEB-1994; 94US-00201109.  
29-MAR-1994; 94US-00218934.  
04-APR-1994; 94US-00222795.  
07-APR-1994; 94US-00224483.  
15-APR-1994; 94US-00227958.  
15-APR-1994; 94US-00228041.  
18-MAY-1994; 94US-00245736.  
06-JUL-1994; 94US-00271280.  
15-AUG-1994; 94US-00291932.  
16-AUG-1994; 94US-00291433.  
17-AUG-1994; 94US-00292620.  
19-AUG-1994; 94US-00293520.  
02-SEP-1994; 94US-00300000.  
08-SEP-1994; 94US-00303039.  
23-SEP-1994; 94US-00311486.  
23-SEP-1994; 94US-00311749.  
28-SEP-1994; 94US-00314397.  
03-OCT-1994; 94US-00316771.  
07-OCT-1994; 94US-00319492.  
11-OCT-1994; 94US-00321993.  
04-NOV-1994; 94US-00334847.  
10-NOV-1994; 94US-00337608.  
28-NOV-1994; 94US-00345516.  
16-DEC-1994; 94US-00357577.  
23-DEC-1994; 94US-00363233.  
30-JAN-1995; 95US-00380734.  
(RIBO-) RIBOZYME PHARM INC.  
Stinchcomb DT, Chowira B, Direnzo A, Draper KG, Dudycz LW,  
Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA,  
Modak A, Pavco P, Beigelman L, Sullivan SM, Sweedler D, Thompson JD,  
Tracz D, Usman N, Wincott FE, Woolf T;  
WPI; 1995-351090/45.  
Ribozymes having modified bases and methods for producing them - for use

PT in inhibiting disease related genes.  
XX  
PS Claim 2; Page 269; 407pp; English.  
XX  
CC The present sequence represents a preferred target sequence for an  
enzymatic nucleic acid (i.e. a ribozyme) which cleaves mRNA coding for a  
protein of respiratory syncytial virus (RSV) at the nucleotide base  
position indicated in the DE line. Regions of the mRNA that do not form  
secondary folding structures and that contain potential hammerhead and  
hairpin ribozyme cleavage sites were identified by computer analysis.  
CC Ribozymes directed against these mRNA sequences were designed and  
synthesised with modifications that improve their nuclease resistance.  
CC The ribozymes cleave the target sequences and can be used for treatment  
and diagnosis of RSV infection. (Updated on 25-MAR-2003 to correct PI  
CC field.) (Updated on 27-AUG-2003 to correct OS field.)  
XX  
SQ Sequence 15 BP; 7 A; 3 C; 0 G; 0 T; 5 U; 0 Other;  
Query Match 14.8%; Score 10.8; DB 1; Length 15;  
Best Local Similarity 85.7%; Pred. No. 8.5e+02;  
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 944 TTGGTTTAAATGTAT 957  
|| ||| |||||  
DB 14 TTAGTTAAATGTAT 1  
RESULT 370  
AAX64777  
ID AAX64777 standard; RNA; 15 BP.  
XX  
AC AAX64777;  
XX  
DT 20-JUL-1999 (first entry)  
XX  
DE Human B7-1 hammerhead ribozyme target SEQ ID NO:1409.  
XX  
KW Artistic condition; graft tolerance; immune response; target; cleavage;  
hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;  
stromelysin; synovial membrane; joint; arthritis; osteoarthritis;  
rheumatoid arthritis; autoimmune disease; allergy; inflammation;  
diagnosis; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO9618736-A2.  
XX  
PD 20-JUN-1996.  
XX  
PF 22-NOV-1995; 95WO-US015516.  
XX  
PR 13-DEC-1994; 94US-00354920.  
PR 23-DEC-1994; 94US-00363253.  
PR 23-DEC-1994; 94US-00363254.  
PR 17-FEB-1995; 95US-00390850.  
PR 20-APR-1995; 95US-00426124.  
PR 02-MAY-1995; 95US-00432874.  
PR 04-MAY-1995; 95US-00434509.  
PR 07-JUL-1995; 95US-0000951P.  
PR 07-JUL-1995; 95US-0000974P.  
PR 07-AUG-1995; 95US-00512861.  
PR 05-OCT-1995; 95US-00541365.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Beigelman L, Stinchcomb DT, Jarvis T, Draper K, Pavco P;  
PI Mcswiggen J, Gustofson J, Usman N, Wincott F, Matulic-Adamic J;  
PI Karpeisky A, Thompson JD, Modak A, Burgin A;  
XX  
DR WPI; 1996-300653/30.  
XX  
PT Enzymatic nucleic acid molecules having a hammer-head motif - used for  
the treatment of arthritis, induction of graft tolerance or treatment of

```

PT XX auto-immune diseases.
PS Claim 10; Page 168; 307pp; English.
XX
CC The present invention describes a novel enzymatic nucleic acid (ENA)
CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues
CC ; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least
CC ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's
CC can inhibit collagenase and stromelysin production in the synovial
CC membrane of joints for the treatment or prevention of arthritis,
CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also
CC be used to treat antigen presenting cells of a donor to induce tolerance
CC in a recipient to an alloantigen of a donor. They can also be used for
CC enhancing graft tolerance or for treating autoimmune disease, and for
CC treating allergies and other inflammatory conditions. The ENA's can also
CC be used in diagnosis. Ribozyme therapy impacts on the expression of
CC stromelysin without introducing the non-specific effects upon gene
CC expression which accompany treatment with retinoids and dexamethasone.
CC The concentration of ribozyme required to affect a therapeutic treatment
CC is lower than that required of antisense molecules, and is highly
CC specific. The present sequence is used in the exemplification of the
CC present invention
XX
SQ Sequence 15 BP; 5 A; 1 C; 2 G; 0 T; 7 U; 0 Other;
Query Match 14.8%; Score 10.8; DB 1; Length 15;
Best Local Similarity 42.9%; Pred. No. 8.5e+02;
Matches 6; Conservative 6; Mismatches 2; Indels 0; Gaps 0;
QY 943 ATTGGTTTAAATGTA 956
Db 1 AUUUGCUUAUGA 14
AAV93860
AAV93860 standard; RNA; 15 BP.
AC AAV93860;
XX
DT 18-FEB-1999 (first entry)
XX
DE Target sequence with sequence homology to c-raf and B-raf position 1603.
XX
KW Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
KW target; substrate; catalyst; modulation; expression; Raf gene; delivery;
KW screening; identification; synthesis; deprotection; purification; cancer;
KW inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;
KW restenosis; rheumatoid arthritis; ss.
XX
OS Homo sapiens.
XX
XX WO9805030-A2.
XX
XX 12-NOV-1998.
XX
XX 05-MAY-1998; 98WO-US009249.
XX
XX 09-MAY-1997; 97US-0046059P.
XX
XX 09-JUN-1997; 97US-0049002P.
XX
XX 03-JUL-1997; 97US-0051718P.
XX
XX 22-AUG-1997; 97US-0056808P.
XX
XX 02-OCT-1997; 97US-0061321P.
XX
XX 02-OCT-1997; 97US-0061324P.
XX
XX 05-NOV-1997; 97US-0064866P.
XX
XX 19-DEC-1997; 97US-0068212P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
PI Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K, Bellon L;
PI Parry T, Beigelman L, Mowaggen JA, Karpeisky A, Burgin A;
PI Thompson J, Workman CT, Beaudry A, Sweedler D;
XX

```

---

```

DR XX MPI; 1999-009494/01.
PT XX Identifying new catalytic nucleic acid that modulates selected processes
PT - especially ribozymes that cleave Raf RNA for treating cancer,
PT restenosis, and also new ribozymes and modified nucleoside triphosphates
XX used as antiviral agents and synthons.
PS Claim 180; Page 177; 259pp; English.
XX
CC A method has been developed for the identification of a nucleic acid
CC capable of modulating a process in a biological system. The method
CC comprises: (a) introducing into the system a random library of nucleic
CC acid catalysts (NAC) having a substrate binding domain (SBD), comprising
CC a random sequence, and a catalytic domain (CD); and (b) identifying NAC
CC in systems where modulation has occurred and/or determining the sequence
CC of at least part of the SBDs in such systems. Nucleic acid molecules with
CC endonuclease activity and catalytic activity, from the present invention,
CC are used to modulate gene expression in plant and mammalian cells and to
CC cleave target nucleic acid, particularly for treating systemic diseases
CC caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic
CC ascites and infection. They may also be used to detect genetic drift and
CC mutations in diseased cells and to determine c-raf RNA. Specifically NACs
CC with RNA-cleaving activity that modulate expression of the Raf gene, are
CC used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or
CC generally any condition associated with the level of c-raf. Introduction
CC of sugar/phosphate modifications increases stability against nuclease and
CC activity. AAV90922 to AAV93877 represent NACs that can be used in the
CC method, specifically for modulating the expression of a Raf gene
XX
SQ Sequence 15 BP; 2 A; 5 C; 2 G; 0 T; 6 U; 0 Other;
Query Match 14.8%; Score 10.8; DB 1; Length 15;
Best Local Similarity 50.0%; Pred. No. 8.5e+02;
Matches 7; Conservative 5; Mismatches 2; Indels 0; Gaps 0;
QY 933 CCTCCTCTTCATTG 946
Db 2 CCUACUCUUAUGG 15
AAV72650/c
AAV72650 standard; DNA; 15 BP.
AC AAV72650;
XX
XX 01-DEC-2000 (first entry)
XX
DE Cystic fibrosis gene UDG-digest fragment SEQ ID #7.
XX
KW Uracil DNA glycosylase; UDG; infectious disease detection; cancer;
KW sickle cell anaemia; cystic fibrosis; thalassaemia; muscular dystrophy;
KW Tay-Sachs disease; ss.
XX
OS Synthetic.
XX
XX US6090553-A.
XX
XX 18-JUL-2000.
XX
XX 29-OCT-1997; 97US-00959853.
XX
XX 29-OCT-1997; 97US-00959853.
XX
XX (BECI ) BECKMAN COULTER INC.
XX
XX Matson RS;
XX
XX MPI; 2000-531416/48.
XX
PT Detecting specific nucleic acid sequence in sample containing nucleic
PT acids involves amplifying nucleic acid, cleaving amplified products with
PT uracil-DNA glycosylase to obtain DNA segments and detecting segments.

```

Example 3; Col 17; 21pp; English.

A new method for detecting specific nucleic acid sequences in a sample involves amplifying the nucleic acid sample by PCR and then cleaving the amplified products with uracil DNA glycosylase (UDG), the resulting DNA fragments are detected using reverse blot hybridisation techniques. The method can be used to distinguish between two different sequences, for example for the detection of a DNA fragment carrying a mutation. The method is useful for detecting the presence or absence of a nucleic acid sequence containing a polymorphic restriction site associated with a disease such as cystic fibrosis disease, and may be used for detecting infectious diseases. Genetic disorders such as sickle cell anaemia, cystic fibrosis, alpha or beta thalassaemia, muscular dystrophy, and Tay-Sachs disease may also be detected using the method. Oncogenes such as RAS may also be detected using the method, for the diagnosis of certain cancers. The present sequence represents a fragment of the cystic fibrosis (CF) gene created by UDG cleavage. This sequence is used in an example of the invention and contains the position of a mutation site in the CF gene. This fragment and the corresponding mutant containing fragment (AAAT2651) can be used to produce probes specifically to identify the mutation, which can then be used in the method of the invention

Sequence 15 BP; 9 A; 3 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 14.8%; Score 10.8; DB 1; Length 15;  
Best Local Similarity 85.7%; Pred. No. 8.5e+02;  
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

911 TCTTTGGTCTTGC 924  
|||||  
15 TCTTTGGTCTTCC 2

RESULT 373  
AAF47624/c  
AAF47624 standard; DNA; 15 BP.

AAF47624;

30-MAR-2001 (first entry)

IGFBP3 oligonucleotide #1044.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;  
IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
hyperneovascular condition; hyperplasia; kidney disease;  
neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
inhibits or reduces growth factor mediated cell proliferation and/or

inflammation.

Example 7; Page 50; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 6 A; 4 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 14.8%; Score 10.8; DB 1; Length 15;  
Best Local Similarity 85.7%; Pred. No. 8.5e+02;  
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

901 CTGTCATTTCTT 914  
|||||  
15 CTGTCATGTCCTT 2

RESULT 374

AAF52177/c

AAF52177 standard; DNA; 15 BP.

AAF52177;

30-MAR-2001 (first entry)

IGF-I oligonucleotide #3137.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;  
IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
hyperneovascular condition; hyperplasia; kidney disease;  
neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
inhibits or reduces growth factor mediated cell proliferation and/or  
inflammation.

Example 8; Page 81; 201pp; English.



CC The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,  
 CC brain or skin, growth factor-mediated malignancies, other sclerotic  
 CC disease, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia  
 XX  
 SQ Sequence 15 BP; 7 A; 3 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 14.8%; Score 10.8; DB 1; Length 15;  
 Best Local Similarity 85.7%; Pred. No. 8.5e+02;  
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGTTTAATG 954  
 |||||  
 Db 15 TCACTGTTTAATG 2

RESULT 375  
 AAF53514  
 ID AAF53514 standard; DNA; 15 BP.  
 XX  
 AC AAF53514;

30-MAR-2001 (first entry)

IGF-I oligonucleotide #4474.

KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.

OS Homo sapiens.

PN WO200078341-A1.

PD 28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 PT inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.

Example 8; Page 90; 201pp; English.

CC The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of

CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,  
 CC brain or skin, growth factor-mediated malignancies, other sclerotic  
 CC disease, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia  
 XX

SQ Sequence 15 BP; 0 A; 7 C; 0 G; 8 T; 0 U; 0 Other;

Query Match 14.8%; Score 10.8; DB 1; Length 15;

Best Local Similarity 85.7%; Pred. No. 8.5e+02;

Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 927 TTTATCCTCTCTCT 940

Db 2 TTTCTCTCTCTCT 15

RESULT 376

AAF53515

ID AAF53515 standard; DNA; 15 BP.

AC AAF53515;

30-MAR-2001 (first entry)

IGF-I oligonucleotide #4475.

KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.

OS Homo sapiens.

PN WO200078341-A1.

PD 28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 PT inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.

Example 8; Page 90; 201pp; English.

CC The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-)

F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 0 A; 7 C; 0 G; 8 T; 0 U; 0 Other;

Query Match 14.8%; Score 10.8; DB 1; Length 15;  
Best Local Similarity 85.7%; Pred. No. 8.5e+02;  
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

927 TTTATCCTCTCTCT 940  
|||||  
1 TTTCTCTCTCTCT 14

RESULT 377  
AAF7625/c  
AAF7625 standard; DNA; 15 BP.

AAF7625;

30-MAR-2001 (first entry)

IGFBP3 oligonucleotide #1045.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wraight CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 7; Page 51; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina,

CC brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

XX Sequence 15 BP; 6 A; 4 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 14.8%; Score 10.8; DB 1; Length 15;

Best Local Similarity 85.7%; Pred. No. 8.5e+02;

Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 901 CTGGTCATTTCCTT 914

|||||  
Db 14 CTGGTCATGTCCTT 1

RESULT 378

AAF52179/c

ID AAF52179 standard; DNA; 15 BP.

XX AC

AAF52179;

DT 30-MAR-2001 (first entry)

XX IGF-I oligonucleotide #3139.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

XX Homo sapiens.

XX WO200078341-A1.

XX 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

XX Wraight CJ, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

XX Example 8; Page 81; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

XX

```
SQ Sequence 15 BP; 8 A; 2 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 14.8%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 8.5e+02;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 940 TTCATTGCTTTAAT 953
    ||||| |||||
Do 14 TTCACCTGTTTAAT 1
RESULT 379
AAAF70047
ID AAF70047 standard; DNA; 15 BP.
AC AAF70047;
XX
XX
XX 18-APR-2001 (first entry)
XX Human TNFRSF11B gene ASO probe, SEQ ID NO: 103.
XX
XX Human; TNFRSF11B; osteoclastogenesis inhibitory factor;
KW single nucleotide polymorphism; SNP; osteoclast recruitment;
KW osteoclast function; osteoporosis; metastatic bone disease;
KW Paget's disease; rheumatoid arthritis; periodontal bone disease; ASO;
KW allele-specific oligonucleotide; probe; ss.
XX
OS Homo sapiens.
XX
XX WO200104137-A1.
XX
XX 18-JAN-2001.
XX
XX 10-JUL-2000; 2000WO-USO18803.
XX
XX 09-JUL-1999; 99US-0143020P.
XX (GENA-) GENAISSANCE PHARM INC.
XX
XX Chew A, Denton RR, Duda A, Nandabalan K, Stephens JC;
XX MPI; 2001-147175/15.
XX
XX Human Osteoclastogenesis Inhibitory Factor nucleotides, comprising single
XX nucleotide polymorphisms, useful for studying e.g. osteoporosis, Paget's
XX disease and rheumatoid arthritis.
XX
XX Claim 15; Page 23; 114pp; English.
XX
XX The present sequence is a probe used to detect polymorphisms in the human
XX osteoclastogenesis inhibitory factor (TNFRSF11B). Polynucleotides
XX comprising one or more of twenty four novel single nucleotide
XX polymorphisms in the TNFRSF11B gene have been identified. TNFRSF11B
XX regulate osteoclast recruitment and function. An understanding of
XX variations in the gene should thus be useful in developing new therapies
XX for metabolic disorders caused by abnormal osteoclast recruitment and
XX function such as osteoporosis, metastatic bone disease, Paget's disease,
XX rheumatoid arthritis and periodontal bone disease
XX
SQ Sequence 15 BP; 3 A; 2 C; 2 G; 7 T; 0 U; 0 Other;
Query Match 14.8%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 8.5e+02;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 919 CTTTGCCTTTTATC 932
    ||||| |||||
Do 2 CTTTGCACTTTTAA 15
RESULT 380
AAAF70049
ID AAF70049 standard; DNA; 15 BP.
AC AAF70049;
XX
XX
XX 07-OCT-2002 (first entry)
XX
XX ASO probe for platelet activating factor receptor gene.
XX
XX Human; platelet activating factor receptor; PTAFR; isogene; cancer;
KW chromosome 1; inflammatory disease; coronary disease; probe; ss.
XX
XX Homo sapiens.
XX
XX WO200251859-A2.
XX
```

04-JUL-2002.  
 05-NOV-2001; 2001WO-US047441.  
 03-NOV-2000; 2000US-0245633P.  
 (GENA-) GENAISANCE PHARM INC.  
 Chew A, Choi JY, Koshy B;  
 WPI; 2002-566672/60.  
 New genetic variants comprising haplotypes of the human platelet  
 Activating Factor Receptor (PTAFR) gene, useful for treating or screening  
 drugs for treating e.g. inflammatory diseases, coronary diseases or  
 cancer.  
 Claim 15; Page 13; 59pp; English.  
 The present sequence represents an allele-specific oligonucleotide (ASO)  
 probe which is used for detecting polymorphisms in the human platelet  
 Activating Factor Receptor (PTAFR) gene. The gene comprises polymorphic  
 sites referred to as PS1-5 to designate the order in which they are  
 located in the gene. Six isogenes of the PTAFR gene exist. The PTAFR gene  
 is located on chromosome 1, and contains 1 exon. Polymorphisms PS3 and  
 PS5 have previously been identified. PS3 and PS5 occur in the coding  
 region. The polynucleotide comprising polymorphisms in the PTAFR gene is  
 useful in screening candidate drugs to treat diseases related to PTAFR  
 activity, e.g. inflammatory diseases, coronary diseases or cancer. The  
 PTAFR isogenes are especially useful for treating these diseases. The  
 methods and haplotypes are useful in improving the efficiency of drug  
 discovery and development processes, or for designing clinical trials of  
 candidate drugs for treating the specific condition or disease described  
 above  
 Sequence 15 BP; 0 A; 1 C; 3 G; 10 T; 0 U; 1 Other;  
 Query Match 14.8%; Score 10.8; DB 1; Length 15;  
 Best Local Similarity 85.7%; Pred. No. 8.5e+02;  
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 908 TTTTCTTTGGTCTT 921  
 |||||  
 2 TTTTCTTTGGTCTT 15  
 RESULT 382  
 ID56140  
 ACDS56140 standard; RNA; 15 BP.  
 ACDS56140;  
 23-SEP-2003 (first entry)  
 HBV enzymatic nucleic acid substrate sequence #63.  
 Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
 RNA stability; RNA expression; RNA synthesis; antisense;  
 enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;  
 ambrzyme; G-cleaver ribozyme; decoy molecule; aptamer;  
 HBV reverse transcriptase; Enhancer I region; viral replication;  
 degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
 liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
 virucide; antiinflammatory; substrate; ss.  
 Hepatitis B virus.  
 WO200281494-A1.  
 17-OCT-2002.  
 26-MAR-2002; 2002WO-US009187.

26-MAR-2001; 2001US-00817879.  
 08-JUN-2001; 2001US-00877478.  
 08-JUN-2001; 2001US-0296876P.  
 24-OCT-2001; 2001US-0335059P.  
 05-DEC-2001; 2001US-0337055P.  
 (RIBO-) RIBOZYME PHARM INC.  
 (BLAT/) BLATT L.  
 (MACE/) MACEJAK D.  
 (MCSW/) MCSWIGGEN J.  
 (MORR/) MORRISSEY D.  
 (PAVC/) PAVCO P.  
 (LEEP/) LEE P.  
 (DRAP/) DRAPER K.  
 (ROBE/) ROBERTS E.  
 Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
 Draper K, Roberts E;  
 WPI; 2003-229207/22.  
 Novel compound useful for treating cirrhosis, liver failure,  
 hepatocellular carcinoma, or condition associated with hepatitis C virus  
 infection.  
 Example 1; Page 213; 387pp; English.  
 The present invention relates to nucleic acid molecules which modulate  
 the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
 Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
 inozymes, zinzymes, ambrzymes, and G-cleaver ribozymes. Also disclosed  
 are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 as oligonucleotides that specifically bind the Enhancer I region of HBV  
 DNA. The nucleic acids may be used to modulate the expression of HBV  
 genes and HBV viral replication. Also disclosed is a method for screening  
 compounds and/or potential therapies directed against HBV. The compounds  
 that modulate the expression and/or replication of HCV. The compounds  
 methods of the invention are useful for the treatment of degenerative and  
 disease states related to HBV and HCV infection, replication and gene  
 expression such as cirrhosis, liver failure, and hepatocellular  
 carcinoma. The present sequence represents a substrate for one of the HBV  
 enzymatic nucleic acid sequences disclosed in the present invention  
 Sequence 15 BP; 2 A; 5 C; 1 G; 0 T; 7 U; 0 Other;  
 Query Match 14.8%; Score 10.8; DB 1; Length 15;  
 Best Local Similarity 42.9%; Pred. No. 8.5e+02;  
 Matches 6; Conservative 6; Mismatches 2; Indels 0; Gaps 0;  
 929 TATCCCTCTCTTC 942  
 :||:||||:|:|:|:|  
 1 UAUGCCCAUCCUUC 14  
 RESULT 383  
 ID56200  
 ACDS56200 standard; RNA; 15 BP.  
 ACDS56200;  
 24-SEP-2003 (first entry)  
 HBV enzymatic nucleic acid substrate sequence #89.  
 Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
 RNA stability; RNA expression; RNA synthesis; antisense;  
 enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;  
 ambrzyme; G-cleaver ribozyme; decoy molecule; aptamer;  
 HBV reverse transcriptase; Enhancer I region; viral replication;  
 degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
 liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;

KW virucide; antiinflammatory; substrate; ss.  
 XX Hepatitis B virus.  
 CS WO200281494-A1.  
 XX 17-OCT-2002.  
 XX 26-MAR-2002; 2002WO-US009187.  
 XX 26-MAR-2001; 2001US-00817879.  
 FR 08-JUN-2001; 2001US-00877478.  
 FR 08-JUN-2001; 2001US-0296876P.  
 FR 24-OCT-2001; 2001US-0335059P.  
 FR 05-DEC-2001; 2001US-0337055P.  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MACE/) MACEJAK D.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (MORR/) MORRISSEY D.  
 PA (PAVC/) PAVCO P.  
 PA (LEBP/) LEE P.  
 PA (DRAP/) DRAPER K.  
 PA (ROBE/) ROBERTS E.  
 XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
 FI Draper K, Roberts E;  
 XX WPI; 2003-229207/22.  
 XX Novel compound useful for treating cirrhosis, liver failure,  
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
 PT infection.  
 XX Example 1; Page 214; 387pp; English.  
 XX The present invention relates to nucleic acid molecules which modulate  
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
 CC inozymes, zincymes, amberzymes, and G-cleaver ribozymes. Also disclosed  
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
 CC DNA. The nucleic acids may be used to modulate the expression of HBV  
 CC genes and HBV viral replication. Also disclosed is a method for screening  
 CC compounds and/or potential therapies directed against HBV, and compounds  
 CC that modulate the expression and/or replication of HCV. The compounds and  
 CC methods of the invention are useful for the treatment of degenerative and  
 CC disease states related to HBV and HCV infection, replication and gene  
 CC expression such as cirrhosis, liver failure, and hepatocellular  
 CC carcinoma. The present sequence represents a substrate for one of the HBV  
 CC enzymatic nucleic acid sequences disclosed in the present invention  
 XX Sequence 15 BP; 2 A; 6 C; 1 G; 0 T; 6 U; 0 Other;  
 SQ Query Match 14.8%; Score 10.8; DB 1; Length 15;  
 Best Local Similarity 42.9%; Pred. No. 8.5e+02;  
 Matches 6; Conservative 6; Mismatches 2; Indels 0; Gaps 0;  
 QY 929 TATCCCTCCTCTTC 942  
 Db 2 UAUGCCUCAUCUC 15  
 RESULT 384  
 ADC66181  
 ID ADC66181 standard; DNA; 15 BP.  
 XX  
 AC ADC66181;  
 XX 18-DEC-2003 (first entry)  
 DT Human CFTR related oligonucleotide.  
 typing; variable site; cystic fibrosis; human;  
 cystic fibrosis transmembrane conductance regulator; CFTR; ss.

XX Human CFTR related oligonucleotide.  
 DE typing; variable site; cystic fibrosis; human;  
 XX cystic fibrosis transmembrane conductance regulator; CFTR; ss.  
 KW Synthetic.  
 XX Homo sapiens.  
 OS WO2003074737-A1.  
 XX 12-SEP-2003.  
 XX 07-MAR-2003; 2003WO-SE000394.  
 PF 07-MAR-2002; 2002SE-00000695.  
 PR (PYRO-) PYROSEQUENCING AB.  
 XX Schiller A, Dunker J;  
 PA WPI; 2003-731684/69.  
 XX Typing at least two variable sites of at least one nucleic acid molecule  
 related to cystic fibrosis by simultaneously or sequentially performing  
 PT primer extension reactions and determining the pattern of nucleotide  
 PT incorporation.  
 XX Example 6; Fig 3; 69pp; English.  
 PS The present invention describes a method for typing at least two variable  
 XX sites of at least one nucleic acid molecule related to cystic fibrosis.  
 CC The method comprises: (a) providing at least one nucleic acid molecule of  
 CC a gene related to cystic fibrosis; (b) providing at least one extension  
 CC primer, which binds to different predetermined sites in the nucleic acid  
 CC molecules, where at least one extension primer is designed to extend over  
 CC at least two potential variable sites in the nucleic acid molecule, and  
 CC nucleotide; (c) simultaneously or sequentially performing primer  
 CC extension reactions; and (d) determining the pattern of nucleotide  
 CC incorporation to obtain a test pattern; optionally (e) comparing the test  
 CC pattern of step (c) with one or more reference patterns, in order to type  
 CC the variable sites of the nucleic acid molecules. Also described: (1)  
 CC diagnosing the genetic predisposition of states, diseases and drug  
 CC response related to the human cystic fibrosis transmembrane conductance  
 CC regulator (CFTR) gene; and (2) a kit for use in the method for typing  
 CC comprising at least one extension primer. The method is useful for typing  
 CC at least two variable sites of at least one nucleic acid molecule related  
 CC to cystic fibrosis. The present sequence represents an oligonucleotide  
 CC which is used in the exemplification of the present invention.  
 XX SQ Sequence 15 BP; 2 A; 1 C; 3 G; 9 T; 0 U; 0 Other;  
 Query Match 14.8%; Score 10.8; DB 1; Length 15;  
 Best Local Similarity 85.7%; Pred. No. 8.5e+02;  
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 909 TTCTTTGGTCTTT 922  
 Db 2 TATCTTTGGTCTTT 15  
 RESULT 385  
 ADC66180  
 ID ADC66180 standard; DNA; 15 BP.  
 XX  
 AC ADC66180;  
 XX 18-DEC-2003 (first entry)  
 DT Human CFTR related oligonucleotide.  
 XX typing; variable site; cystic fibrosis; human;  
 KW cystic fibrosis transmembrane conductance regulator; CFTR; ss.

Synthetic.  
Homo sapiens.  
WO2003074737-A1.  
12-SEP-2003.  
07-MAR-2003; 2003WO-SE000394.  
07-MAR-2002; 2002SE-00000695.  
(PYRO-) PYROSEQUENCING AB.  
Schiller A, Dunker J;  
WPI; 2003-731684/69.  
Typing at least two variable sites of at least one nucleic acid molecule related to cystic fibrosis by simultaneously or sequentially performing primer extension reactions and determining the pattern of nucleotide incorporation.  
Example 6; Fig 3; 69pp; English.  
The present invention describes a method for typing at least two variable sites of at least one nucleic acid molecule related to cystic fibrosis. The method comprises: (a) providing at least one nucleic acid molecule of a gene related to cystic fibrosis; (b) providing at least one extension primer, which binds to different predetermined sites in the nucleic acid molecule, where at least one extension primer is designed to extend over at least two potential variable sites in the nucleic acid molecule, and nucleotide; (c) simultaneously or sequentially performing primer extension reactions; and (d) determining the pattern of nucleotide incorporation to obtain a test pattern; optionally (e) comparing the test pattern of step (c) with one or more reference patterns, in order to type the variable sites of the nucleic acid molecule. Also described: (1) diagnosing the genetic predisposition of states, diseases and drug response related to the human cystic fibrosis transmembrane conductance regulator (CFTR) gene; and (2) a kit for use in the method for typing comprising at least one extension primer. The method is useful for typing at least two variable sites of at least one nucleic acid molecule related to cystic fibrosis. The present sequence represents an oligonucleotide which is used in the exemplification of the present invention.  
Sequence 15 BP; 2 A; 1 C; 3 G; 9 T; 0 U; 0 Other;  
Query Match 14.8%; Score 10.8; DB 1; Length 15;  
Best Local Similarity 85.7%; Pred. No. 8.5e+02;  
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
909 TTCTTTGCTCTTT 922  
| | | | | | | | | |  
2 TATCTTTGCTTTT 15  
RESULT 386  
AD58084  
AAD58084 standard; DNA; 16 BP.  
AAD58084;  
20-NOV-2003 (first entry)  
Maize heartbreaker (Hbr7) gene right flanking region.  
Genetic identity; mobile element; ME; genotyping; phylogenetic study; medical diagnostic; forensic science; pedigree analysis; haplotyping; breeding; maize; heartbreaker; Hbr7; ds.  
Zea mays.  
WO2003064686-A1

07-AUG-2003.  
29-JAN-2003; 2003WO-FI000071.  
30-JAN-2002; 2002FI-00000176.  
(BORE-) BOREAL PLANT BREEDING LTD.  
Schulman AH, Paulin LG;  
WPI; 2003-646156/61.  
Demonstrating genetic identity or diversity, genomic variation or polymorphisms, allelic variation and co-dominant scoring in a population pool, useful for genotyping, comprises detecting a mobile element and its integration site.  
Example 2; Page 41; 91pp; English.  
The invention relates to method and kit for demonstrating genetic identity, genetic diversity, genomic variations or polymorphisms, allelic variation and co-dominant scoring within a defined population pool. The method involves detecting the presence or absence of mobile elements (MEs) and their respective insertion site junctions across the whole range of genotypes in a population pool. The invention is useful for distinguishing any organism differing in at least one integration site of at least one ME integration site in any given genomic position; for genotyping, phylogenetic studies, parentage determinations, human medical diagnostics, forensic science, pedigree analysis, haplotyping and in plant and animal breeding by demonstrating genetic identity, genetic diversity, genomic variation or polymorphism and particularly co-dominant scoring; and for assured and accelerated breeding. The present sequence is maize heartbreaker (Hbr7) gene right flanking region. This sequence is used to illustrate the method of the invention  
Sequence 16 BP; 1 A; 4 C; 3 G; 8 T; 0 U; 0 Other;  
Query Match 14.8%; Score 10.8; DB 1; Length 16;  
Best Local Similarity 85.7%; Pred. No. 8.8e+02;  
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
905 TCATTTTCTTTGGT 918  
| | | | | | | | | |  
3 TCCTTTGCTTTGT 16  
Query Match 14.8%; Score 10.8; DB 1; Length 16;  
Best Local Similarity 85.7%; Pred. No. 8.8e+02;  
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
905 TCATTTTCTTTGGT 918  
| | | | | | | | | |  
3 TCCTTTGCTTTGT 16  
RESULT 387  
ABK55515  
ID ABK55515 standard; DNA; 15 BP.  
AC ABK55515;  
18-JUN-2002 (first entry)  
Selectin L Lymphocyte Adhesion Molecule 1 (SELL) oligonucleotide #51.  
Human; Selectin L Lymphocyte Adhesion Molecule 1; SELL;  
neonatal pertussis; whooping cough; haplotyping; primer;  
allele-specific oligonucleotide; ss.  
Homo sapiens.  
WO200216654-A1.  
28-FEB-2002.  
27-AUG-2001; 2001WO-US026675.  
25-AUG-2000; 2000US-0228262P.  
(GENA-) GENAISSANCE PHARM INC.  
WO2003064686-A1

I Anastasio AE, Bieglecki KM, Kliem SE, Koshy B, Kumar AM;  
 XX WPI; 2002-292071/33.  
 XX  
 XX Novel genetic variants of selectin L lymphocyte adhesion molecule 1  
 FT (SELL) gene useful for therapeutic purposes and for expressing SELL  
 FT protein useful in identifying drugs to treat whooping cough.  
 XX  
 XX Claim 17; Page 14; 137pp; English.  
 PS  
 XX The invention relates to an isolated polynucleotide (I) comprising a  
 CC nucleotide sequence which is a polymorphic variant of a reference  
 CC sequence for Selectin L Lymphocyte Adhesion Molecule 1 (SELL) gene. SELL  
 CC polypeptide is useful for screening for drugs targeting the polypeptide.  
 CC Oligonucleotides derived from (I) are used to target SELL and a haplotype  
 CC or haplotype pair of SELL gene. These are useful in developing diagnostic  
 CC tests and therapeutic treatments for neonatal pertussis (whooping cough).  
 CC (I) is useful for studying the expression and function of SELL and  
 CC expressing SELL protein for use in screening for candidate drugs to treat  
 CC diseases related to SELL activity. The polymorphism and haplotype data  
 CC are useful for validating whether SELL is a suitable target for drugs to  
 CC treat whooping cough, screening for such drugs and reducing bias in  
 CC clinical trials of such drugs. Establishing the SELL haplotype or  
 CC haplotype pair of an individual is useful for improving the efficiency  
 CC and reliability of several steps in the discovery and development of  
 CC drugs for treating diseases associated with SELL activity e.g. neonatal  
 CC pertussis (whooping cough). The haplotyping method is useful to validate  
 CC SELL as a candidate target for treating a specific condition or disease  
 CC predicted to be associated with SELL activity. The method is also useful  
 CC in screening for compounds targeting SELL to treat a specific condition  
 CC or disease predicted to be associated with SELL activity, e.g. detecting  
 CC which of the SELL haplotypes or haplotype pairs present in individual  
 CC members of a population with the specific disease of interest enables one  
 CC to screen for compounds that display the highest desired agonist or  
 CC antagonist activity for each of the most frequent SELL isoforms present  
 CC in the disease population. A polymorphic variant of SELL is useful in  
 CC studying the effect of the variation on the biological activity of SELL,  
 CC on the binding affinity of candidate drugs targeting SELL for the  
 CC treatment of neonatal pertussis (whooping cough) and in assays to measure  
 CC the binding affinities of one or more candidate drugs targeting the SELL  
 CC protein. ABK55465-ABK5559 represent SELL gene allele-specific  
 CC oligonucleotides of the invention  
 XX  
 XX Sequence 15'BP; 2 A; 2 C; 3 G; 7 T; 0 U; 1 Other;  
 SQ  
 Query Match 14.5%; Score 10.6; DB 1; Length 15;  
 Best Local Similarity 90.9%; Pred. No. 9.1e+02;  
 Matches 10; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
 QY 901 CTGGTCATTTT 911  
 Db |||||:|||||  
 4 CTGGTCATTYK 14  
 RESULT 388  
 AAS98676  
 ID AAS98676 standard; DNA; 15 BP.  
 XX  
 XX AAS98676;  
 AC  
 XX 26-MAR-2002 (first entry)  
 DT  
 DT Colony stimulating factor 1 receptor (CSF1R) oligonucleotide #42.  
 XX  
 XX Colony stimulating factor 1 receptor; CSF1R; polymorphic variant;  
 KW cytosstatic; gene therapy; malignant histiocytosis; isogene;  
 KW myeloid malignancy; inflammatory disorder; transgenic animal; haplotype;  
 KW genotype; human; allele specific oligonucleotide; ASO; probe; ss.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO200179225-A2.  
 PN  
 XX

PD 25-OCT-2001.  
 XX  
 PF 12-APR-2001; 2001WO-US012044.  
 XX  
 XX 12-APR-2000; 2000US-0196411P.  
 PR  
 XX (GENA-) GENAISSANCE PHARM INC.  
 PA  
 XX Chew A, Choi JY, Koshy B;  
 PI WPI; 2002-075058/10.  
 DR  
 XX Novel polymorphic variants of colony stimulating factor 1 receptor useful  
 PT in studying expression and function of the protein, useful for screening  
 PT candidate drugs to treat diseases e.g. inflammatory disorders.  
 XX  
 XX Claim 15; Page 15; 164pp; English.  
 PS  
 XX The invention describes a novel isolated polynucleotide (I) comprising a  
 CC sequence which is a polymorphic variant (PV) of a reference sequence for  
 CC colony stimulating factor 1 receptor (CSF1R) gene, found on The  
 CC polypeptide are useful for improving the discovery and development of  
 CC drugs for treating diseases associated with CSF1R activity, e.g.,  
 CC malignant histiocytosis, myeloid malignancies, and inflammatory disorders  
 CC and the haplotypes can be used to validate CSF1R as a candidate target  
 CC for treating a specific condition or disease predicted to be associated  
 CC with CSF1R activity. Genotyping the CSF1R gene of an individual can also  
 CC be used in developing diagnostic tests and therapeutic treatments. (I) is  
 CC useful in studying the expression and function of CSF1R, and in  
 CC expressing CSF1R protein for use in screening for candidate drugs to  
 CC treat diseases related to CSF1R activity and in studying the effect of  
 CC the variation on the biological activity of CSF1R as well as on the  
 CC binding affinity of candidate drugs targeting CSF1R. Antibodies are  
 CC useful in a variety of diagnostic and prognostic formats and therapeutic  
 CC methods. A transgenic animal is useful in studying expression of the  
 CC CSF1R isogenes in vivo, for in vivo screening and testing of drugs  
 CC targeted against CSF1R protein, and for testing the efficacy of  
 CC therapeutic agents and compounds. Allele specific oligonucleotides (ASO)  
 CC are useful as probes and primers, and for assaying a polymorphism in the  
 CC target region. Without requiring any a priori knowledge of the phenotypic  
 CC effect of any particular CSF1R or haplotype the invention provides a  
 CC method for identifying lead compounds that are more likely to show  
 CC efficacy in clinical trials. This sequence is an allele specific  
 CC oligonucleotide probe used for detecting CSF1R gene polymorphisms,  
 CC described in the method of the invention  
 XX  
 XX Sequence 15 BP; 1 A; 8 C; 0 G; 5 T; 0 U; 1 Other;  
 SQ  
 Query Match 14.5%; Score 10.6; DB 1; Length 15;  
 Best Local Similarity 90.9%; Pred. No. 9.1e+02;  
 Matches 10; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
 QY 930 ATCCCTCCTCT 940  
 Db |||||:|||||  
 2 ATCCCTCTCT 12  
 RESULT 389  
 AAX14698/c  
 ID AAX14698 standard; DNA; 12 BP.  
 XX  
 XX AAX14698;  
 AC  
 XX 24-MAR-1999 (first entry)  
 DT  
 DT Triple helix forming nucleotides 2236-2247 of retinoblastoma gene.  
 XX  
 XX Triple-helix forming region; Triplex formation; DNA detection;  
 KW identification; bacteria; oncogene; virus; ds.  
 XX  
 XX Homo sapiens.  
 OS  
 XX US5861244-A.  
 PN





CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

SQ Sequence 12 BP; 4 A; 0 C; 2 G; 6 T; 0 U; 0 Other;  
 Query Match 14.2%; Score 10.4; DB 1; Length 12;  
 Best Local Similarity 91.7%; Pred. No. 8.6e+02;  
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 945 TGGTTTAATGTA 956  
 DB 1 TGATTTAATGTA 12

RESULT 392  
 ABH98829/c  
 ID ABH98829 standard; DNA; 12 BP.  
 XX AC ABH98829;  
 XX DT 22-FEB-2002 (first entry)

XX Oligonucleotide primer SEQ ID NO 298822 for detecting SNP TSC0018300.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 XX designed to detect single-nucleotide polymorphisms and cytosine  
 XX methylation status.  
 XX Claim 1; SEQ ID NO 298822; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
 XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 XX and cytosine methylation status in chemically pretreated genomic DNA. The  
 XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 XX range of diseases including immune system, gastrointestinal, respiratory,  
 XX central nervous system, cardiovascular and metabolic disorders. The  
 XX oligomers are also used for detecting cell type differentiation. ABC00010  
 XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 XX represent the oligomers described in the invention. NOTE: The sequence  
 XX data for this patent did not form part of the printed specification, but  
 XX was obtained in electronic format from WIPO at  
 XX ftp.wipo.int/pub/published\_pct\_sequences

SQ Sequence 12 BP; 7 A; 2 C; 0 G; 3 T; 0 U; 0 Other;  
 Query Match 14.2%; Score 10.4; DB 1; Length 12;  
 Best Local Similarity 91.7%; Pred. No. 8.6e+02;  
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 945 TGGTTTAATGTA 956  
 DB 1 TGATTTAATGTA 12

RESULT 392  
 ABH98829/c  
 ID ABH98829 standard; DNA; 12 BP.  
 XX AC ABH98829;  
 XX DT 22-FEB-2002 (first entry)

XX Oligonucleotide primer SEQ ID NO 298822 for detecting SNP TSC0018300.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 XX designed to detect single-nucleotide polymorphisms and cytosine  
 XX methylation status.  
 XX Claim 1; SEQ ID NO 298822; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
 XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 XX and cytosine methylation status in chemically pretreated genomic DNA. The  
 XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 XX range of diseases including immune system, gastrointestinal, respiratory,  
 XX central nervous system, cardiovascular and metabolic disorders. The  
 XX oligomers are also used for detecting cell type differentiation. ABC00010  
 XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 XX represent the oligomers described in the invention. NOTE: The sequence  
 XX data for this patent did not form part of the printed specification, but  
 XX was obtained in electronic format from WIPO at  
 XX ftp.wipo.int/pub/published\_pct\_sequences

QY 945 TGGTTTAATGTA 956  
 DB 12 TGGTTTAATGTA 1

RESULT 393  
 ABI28750/c  
 ID ABI28750 standard; DNA; 12 BP.  
 XX AC ABI28750;  
 XX DT 22-FEB-2002 (first entry)

XX Oligonucleotide primer SEQ ID NO 328723 for detecting SNP TSC0034506.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 XX designed to detect single-nucleotide polymorphisms and cytosine  
 XX methylation status.  
 XX Claim 1; SEQ ID NO 328723; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
 XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 XX and cytosine methylation status in chemically pretreated genomic DNA. The  
 XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 XX range of diseases including immune system, gastrointestinal, respiratory,  
 XX central nervous system, cardiovascular and metabolic disorders. The  
 XX oligomers are also used for detecting cell type differentiation. ABC00010  
 XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 XX represent the oligomers described in the invention. NOTE: The sequence  
 XX data for this patent did not form part of the printed specification, but  
 XX was obtained in electronic format from WIPO at  
 XX ftp.wipo.int/pub/published\_pct\_sequences

SQ Sequence 12 BP; 4 A; 0 C; 6 G; 2 T; 0 U; 0 Other;  
 Query Match 14.2%; Score 10.4; DB 1; Length 12;  
 Best Local Similarity 91.7%; Pred. No. 8.6e+02;  
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 932 CCTCTCTCTTCA 943  
 DB 12 CCTCTCTCTTCA 1

RESULT 394  
 ABI13405/c  
 ID ABI13405 standard; DNA; 12 BP.  
 XX AC ABI13405;  
 XX DT 22-FEB-2002 (first entry)

XX Oligonucleotide primer SEQ ID NO 328723 for detecting SNP TSC0034506.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 XX designed to detect single-nucleotide polymorphisms and cytosine  
 XX methylation status.  
 XX Claim 1; SEQ ID NO 328723; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
 XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 XX and cytosine methylation status in chemically pretreated genomic DNA. The  
 XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 XX range of diseases including immune system, gastrointestinal, respiratory,  
 XX central nervous system, cardiovascular and metabolic disorders. The  
 XX oligomers are also used for detecting cell type differentiation. ABC00010  
 XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 XX represent the oligomers described in the invention. NOTE: The sequence  
 XX data for this patent did not form part of the printed specification, but  
 XX was obtained in electronic format from WIPO at  
 XX ftp.wipo.int/pub/published\_pct\_sequences

Oligonucleotide primer SEQ ID NO 313378 for detecting SNP TSC0025707.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 313378; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 12 BP; 8 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 12;  
Best Local Similarity 91.7%; Pred. No. 8.6e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Y 907 ATTTCCTTGGT 918  
||||| |||||  
C 12 ATTTCCTTGGT 1

RESULT 395  
BI47521/c  
D ABI47521 standard; DNA; 12 BP.  
X  
C ABI47521;  
X  
F 22-FEB-2002 (first entry)  
X  
K Oligonucleotide primer SEQ ID NO 347494 for detecting SNP TSC0008573.  
X  
W SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
W peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
W central nervous system; gastrointestinal; respiratory; immune; metabolic.  
X  
S Homo sapiens.  
X  
N WO200177384-A2.  
X  
D 18-OCT-2001.  
X  
F 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.  
PR (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 347494; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 12 BP; 5 A; 4 C; 0 G; 3 T; 0 U; 0 Other;  
Query Match 14.2%; Score 10.4; DB 1; Length 12;  
Best Local Similarity 91.7%; Pred. No. 8.6e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 943 ATTGGTTTAATG 954  
||||| |||||  
Db 12 ATTGGTTTAATG 1

RESULT 396  
ABI72904/c  
ID ABI72904 standard; DNA; 12 BP.  
XX  
AC ABI72904;  
XX  
DT 22-FEB-2002 (first entry)  
XX  
XX Oligonucleotide primer SEQ ID NO 372877 for detecting SNP TSC0059702.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX

FS Claim 1; SEQ ID NO 372877; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 12 BP; 7 A; 2 C; 0 G; 3 T; 0 U; 0 Other;  
  
Query Match 14.2%; Score 10.4; DB 1; Length 12;  
Best Local Similarity 91.7%; Pred. No. 8.6e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 946 GGTTTAATGTAT 957  
DQ 12 GTTTAATGTAT 1  
| | | | | | | | | |  
| | | | | | | | | |  
  
RESULT 397  
ABH95290  
TD ABH95290 standard; DNA; 12 BP.  
XX  
AC ABH95290;  
XX  
DT 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide primer SEQ ID NO 295283 for detecting SNP TSC0016521.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 295283; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at

CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 12 BP; 0 A; 8 C; 0 G; 4 T; 0 U; 0 Other;  
  
Query Match 14.2%; Score 10.4; DB 1; Length 12;  
Best Local Similarity 91.7%; Pred. No. 8.6e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 931 TCCCTCCTCTTC 942  
DB 1 TCCCTCCTCTTC 12  
| | | | | | | | | |  
| | | | | | | | | |  
  
RESULT 398  
ABH99684  
ID ABH99684 standard; DNA; 12 BP.  
XX  
AC ABH99684;  
XX  
DT 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide primer SEQ ID NO 299677 for detecting SNP TSC0018678.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 299677; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 12 BP; 4 A; 6 C; 0 G; 2 T; 0 U; 0 Other;  
  
Query Match 14.2%; Score 10.4; DB 1; Length 12;  
Best Local Similarity 91.7%; Pred. No. 8.6e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 956 ATCGCTACCAAC 967  
DB 1 ATCGCTACCAAC 12  
| | | | | | | | | |  
| | | | | | | | | |

```
SULT 399
I43942/c
  ABI43942 standard; DNA; 12 BP.
  ABI43942;
  22-FEB-2002 (first entry)
  Oligonucleotide primer SEQ ID NO 343915 for detecting SNP TSC0043297.
  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
  peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
  central nervous system; gastrointestinal; respiratory; immune; metabolic.
  Homo sapiens.
  WO200177384-A2.
  18-OCT-2001.
  06-APR-2001; 2001WO-IB000713.
  07-APR-2000; 2000DE-01019173.
  (EPIG-) EPIGENOMICS AG.
  Olek A, Piepenbrock C, Berlin K;
  WPI; 2001-657177/75.
  Set of oligonucleotides, useful for diagnosis and cell typing, is
  designed to detect single-nucleotide polymorphisms and cytosine
  methylation status.
  Claim 1; SEQ ID NO 343915; 29pp + Sequence Listing; German.
  This invention describes novel oligonucleotide primers or peptide nucleic
  acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
  and cytosine methylation status in chemically pretreated genomic DNA. The
  oligonucleotides are used for diagnosis and/or prognosis of cancer and a
  range of diseases including immune system, gastrointestinal, respiratory,
  central nervous system, cardiovascular and metabolic disorders. The
  oligomers are also used for detecting cell type differentiation. ABC00010
  -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
  represent the oligomers described in the invention. NOTE: The sequence
  data for this patent did not form part of the printed specification, but
  was obtained in electronic format from WIPO at
  ftp.wipo.int/pub/published_pct_sequences
  Sequence 12 BP; 3 A; 0 C; 4 G; 5 T; 0 U; 0 Other;
  This invention describes novel oligonucleotide primers or peptide nucleic
  acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
  and cytosine methylation status in chemically pretreated genomic DNA. The
  oligonucleotides are used for diagnosis and/or prognosis of cancer and a
  range of diseases including immune system, gastrointestinal, respiratory,
  central nervous system, cardiovascular and metabolic disorders. The
  oligomers are also used for detecting cell type differentiation. ABC00010
  -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
  represent the oligomers described in the invention. NOTE: The sequence
  data for this patent did not form part of the printed specification, but
  was obtained in electronic format from WIPO at
  ftp.wipo.int/pub/published_pct_sequences
  Query Match 14.2%; Score 10.4; DB 1; Length 12;
  Best Local Similarity 91.7%; Pred. No. 8.6e+02;
  Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
  955 TATCGCTACCAA 966
  12 TATCACTACCAA 1
  RESULT 400
  3H80382/c
  ABH80382 standard; DNA; 12 BP.
  ABH80382;
  22-FEB-2002 (first entry)
  Oligonucleotide primer SEQ ID NO 280375 for detecting SNP TSC0008537.
  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
  peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
  central nervous system; gastrointestinal; respiratory; immune; metabolic.
```

```
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 280375; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Sequence 12 BP; 8 A; 3 C; 0 G; 1 T; 0 U; 0 Other;
SQ
  Query Match 14.2%; Score 10.4; DB 1; Length 12;
  Best Local Similarity 91.7%; Pred. No. 8.6e+02;
  Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
  QY 944 TTGGTTTAAATGT 955
  Db 12 TTGGTTTAAATGT 1
  RESULT 401
  ABI07550
  ID ABI07550 standard; DNA; 12 BP.
  XX ABI07550;
  XX 22-FEB-2002 (first entry)
  XX Oligonucleotide primer SEQ ID NO 307523 for detecting SNP TSC0022540.
  XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
  XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
  XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
  XX Homo sapiens.
  XX WO200177384-A2.
  XX 18-OCT-2001.
  XX 06-APR-2001; 2001WO-IB000713.
  XX 07-APR-2000; 2000DE-01019173.
  XX (EPIG-) EPIGENOMICS AG.
  XX
```

PI Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
XX Claim 1; SEQ ID NO 307523; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 12 BP; 1 A; 0 C; 3 G; 8 T; 0 U; 0 Other;  
Query Match 14.2%; Score 10.4; DB 1; Length 12;  
Best Local Similarity 91.7%; Pred. No. 8.6e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
CY 944 TTGGTTTAATGCT 955  
DB 1 TTGGTTTAATGCT 12  
|||||  
RESULT 402  
ABI61878  
ID ABI61878 standard; DNA; 12 BP.  
XX  
AC ABI61878;  
XX  
XX 22-FEB-2002 (first entry)  
XX  
XX Oligonucleotide primer SEQ ID NO 361851 for detecting SNP TSC0052889.  
DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
XX Claim 1; SEQ ID NO 361851; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 12 BP; 2 A; 6 C; 0 G; 4 T; 0 U; 0 Other;  
Query Match 14.2%; Score 10.4; DB 1; Length 12;  
Best Local Similarity 91.7%; Pred. No. 8.6e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
CY 929 TATCCCTCCTCT 940  
DB 1 TATCCCTCCTCT 12  
|||||  
RESULT 403  
ABH69318  
ID ABH69318 standard; DNA; 12 BP.  
XX  
AC ABH69318;  
XX  
XX 22-FEB-2002 (first entry)  
XX  
XX Oligonucleotide primer SEQ ID NO 269295 for detecting SNP TSC0001704.  
DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
XX Claim 1; SEQ ID NO 269295; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 12 BP; 1 A; 4 C; 0 G; 7 T; 0 U; 0 Other;  
Query Match 14.2%; Score 10.4; DB 1; Length 12;





represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 12 BP; 0 A; 5 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 12;  
Best Local Similarity 91.7%; Pred. No. 8.6e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

927 TTTATCCCTCT 938  
|||||  
1 TTTTCCCTCT 12

RESULT 409  
ABH68474/c  
ABH68474 standard; DNA; 12 BP.  
ABH68474;  
22-FEB-2002 (first entry)  
Oligonucleotide primer SEQ ID NO 268451 for detecting SNP TSC0001154.  
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.  
Homo sapiens.  
WO200177384-A2.  
18-OCT-2001.  
06-APR-2001; 2001WO-IB000713.  
07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
Claim 1; SEQ ID NO 268451; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 12 BP; 6 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 12;  
Best Local Similarity 91.7%; Pred. No. 8.6e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

946 GGTTAATGAT 957  
|||||

Db 12 GGTTAATATAT 1

RESULT 410  
ABH68840/c  
ABH68840 standard; DNA; 12 BP.  
ABH68840;  
22-FEB-2002 (first entry)  
Oligonucleotide primer SEQ ID NO 268817 for detecting SNP TSC0001432.  
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.  
Homo sapiens.  
WO200177384-A2.  
18-OCT-2001.  
06-APR-2001; 2001WO-IB000713.  
07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
Claim 1; SEQ ID NO 268817; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 12 BP; 8 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 12;  
Best Local Similarity 91.7%; Pred. No. 8.6e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

940 TTCAATGGTTA 951  
|||||  
12 TTTAATGGTTA 1

Db

RESULT 411  
ABI30473  
ABI30473 standard; DNA; 12 BP.  
ABI30473;  
22-FEB-2002 (first entry)  
Oligonucleotide primer SEQ ID NO 330446 for detecting SNP TSC0035529.  
XX



KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 OS Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 PD 06-APR-2001; 2001WO-IB000713.  
 PF 07-APR-2000; 2000DE-01019173.  
 XX (EPITG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 EI WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 FT methylation status.  
 XX Claim 1; SEQ ID NO 330446; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX Sequence 12 BP; 1 A; 0 C; 3 G; 8 T; 0 U; 0 Other;  
 SQ Query Match 14.2%; Score 10.4; DB 1; Length 12;  
 Best Local Similarity 91.7%; Pred. No. 8.6e+02;  
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 944 TTGCTTTAATGT 955  
 DB 1 TTGCTTTAATGT 12  
 RESULT 412  
 ABI58887/C  
 ID ABI58887 standard; DNA; 12 BP.  
 AC ABI58887;  
 XX 22-FEB-2002 (first entry)  
 DT Oligonucleotide primer SEQ ID NO 358860 for detecting SNP TSC0051348.  
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 OS Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 PD 06-APR-2001; 2001WO-IB000713.  
 PF 07-APR-2000; 2000DE-01019173.  
 XX (EPITG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 EI WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 FT methylation status.  
 XX Claim 1; SEQ ID NO 366355; 29pp + Sequence Listing; German.

XX (EPITG-) EPIGENOMICS AG.  
 PA Olek A, Piepenbrock C, Berlin K;  
 PI WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 FT methylation status.  
 XX Claim 1; SEQ ID NO 358860; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX Sequence 12 BP; 4 A; 0 C; 8 G; 0 T; 0 U; 0 Other;  
 SQ Query Match 14.2%; Score 10.4; DB 1; Length 12;  
 Best Local Similarity 91.7%; Pred. No. 8.6e+02;  
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 931 TCCCTCCCTTC 942  
 DB 12 TCCCTCCCTTC 1  
 RESULT 413  
 ABI66382/C  
 ID ABI66382 standard; DNA; 12 BP.  
 AC ABI66382;  
 XX 22-FEB-2002 (first entry)  
 DT Oligonucleotide primer SEQ ID NO 366355 for detecting SNP TSC0055697.  
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 OS Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 PD 06-APR-2001; 2001WO-IB000713.  
 PF 07-APR-2000; 2000DE-01019173.  
 XX (EPITG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 EI WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 FT methylation status.  
 XX Claim 1; SEQ ID NO 366355; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 12 BP; 8 A; 3 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 12;  
Best Local Similarity 91.7%; Pred. No. 8.6e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
944 TTGGTTTAACTGT 955  
|||||  
12 TTGGTTTAACTGT 1

RESULT 414

HG69400  
ABH69400 standard; DNA; 12 BP.

ABH69400;

22-FEB-2002 (first entry)

Oligonucleotide primer SEQ ID NO 269377 for detecting SNP TSC0001727.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.  
Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 269377; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

SQ Sequence 12 BP; 1 A; 6 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 12;  
Best Local Similarity 91.7%; Pred. No. 8.6e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 931 TCCCTCCTCTTC 942

|||||  
1 TCCCTCCTCTTC 12

RESULT 415

ABH74885/c

ID ABH74885 standard; DNA; 12 BP.

XX ABH74885;

22-FEB-2002 (first entry)

Oligonucleotide primer SEQ ID NO 274872 for detecting SNP TSC0003709.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.  
Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 274872; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 12 BP; 6 A; 4 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 12;  
Best Local Similarity 91.7%; Pred. No. 8.6e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 945 TGGTTTAACTGA 956

|||||  
12 TGGTTTAACTGA 1

RESULT 416

ABH81639/c

```

ID ABH81639 standard; DNA; 12 BP.
AC ABH81639;
CT 22-FEB-2002 (first entry)
DE Oligonucleotide primer SEQ ID NO 281632 for detecting SNP TSC0009952.
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
CS Homo sapiens.
PX W0200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 281632; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 9 A; 2 C; 0 G; 1 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 907 ATTTCCTTTGGT 918
DB 12 ATTTTCTTTGGT 1
|||||
RESULT 417
ABI64573/c
ID ABI64573 standard; DNA; 12 BP.
AC ABI64573;
XX 22-FEB-2002 (first entry)
DE Oligonucleotide primer SEQ ID NO 364546 for detecting SNP TSC0054560.
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
CS Homo sapiens.

```

```

XX W0200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 364546; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 6 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 944 TTGGTTTAAATGT 955
DB 12 TTGGTTTAAATGT 1
|||||
RESULT 418
ABI23775/c
ID ABI23775 standard; DNA; 12 BP.
AC ABI23775;
XX 22-FEB-2002 (first entry)
DE Oligonucleotide primer SEQ ID NO 323748 for detecting SNP TSC0031585.
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
CS Homo sapiens.
PX W0200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
PI Olek A, Piepenbrock C, Berlin K;

```

```
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 323748; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 12 BP; 7 A; 0 C; 4 G; 1 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
922 TGCCTTTATCC 933
12 TGCCTTTATCC 1
RESULT 419
ABH7314/C
ABH77314;
22-FEB-2002 (first entry)
Oligonucleotide primer SEQ ID NO 277307 for detecting SNP TSC0004434.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 277307; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 12 BP; 7 A; 3 C; 0 G; 2 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
922 TGCCTTTATCC 933
12 TGCCTTTATCC 1
RESULT 420
ABH83110/C
ABH83110 standard; DNA; 12 BP.
XX AC ABH83110;
XX AC
XX 22-FEB-2002 (first entry)
XX DT
XX DE Oligonucleotide primer SEQ ID NO 283103 for detecting SNP TSC001145.
XX SN; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX DX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 283103; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 12 BP; 5 A; 3 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```

QY 946 GGTTTAATGTAT 957
  12 GGTTTAATGAAT 1
RESULT 421
ID ABH84313/c
  12 ABH84313 standard; DNA; 12 BP.
AC ABH84313;
  22-FEB-2002 (first entry)
DE Oligonucleotide primer SEQ ID NO 284306 for detecting SNP TSC0011770.
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
  peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
  central nervous system; gastrointestinal; respiratory; immune; metabolic.
OS Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 22-FEB-2002 (first entry)
XX Oligonucleotide primer SEQ ID NO 284306 for detecting SNP TSC0011770.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
  peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
  central nervous system; gastrointestinal; respiratory; immune; metabolic.
OS Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
  designed to detect single-nucleotide polymorphisms and cytosine
  methylation status.
XX Claim 1; SEQ ID NO 284306; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
  acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
  and cytosine methylation status in chemically pretreated genomic DNA. The
  oligonucleotides are used for diagnosis and/or prognosis of cancer and a
  range of diseases including immune system, gastrointestinal, respiratory,
  central nervous system, cardiovascular and metabolic disorders. The
  oligomers are also used for detecting cell type differentiation. ABC00010
  -ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
  represent the oligomers described in the invention. NOTE: The sequence
  data for this patent did not form part of the printed specification, but
  was obtained in electronic format from WIPO at
  ftp.wipo.int/pub/published_pct_sequences
XX Sequence 12 BP; 7 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
XX Query Match 14.2%; Score 10.4; DB 1; Length 12;
  Best Local Similarity 91.7%; Pred. No. 8.6e+02;
  Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 945 TGGTTTAAATGTA 956
  12 TGGTTTAAATTTA 1
RESULT 422
ID ABI41641
  12 ABI41641 standard; DNA; 12 BP.
AC ABI41641;
  22-FEB-2002 (first entry)

```

```

XX Oligonucleotide primer SEQ ID NO 341614 for detecting SNP TSC0042137.
DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
  peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
  central nervous system; gastrointestinal; respiratory; immune; metabolic.
OS Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
  designed to detect single-nucleotide polymorphisms and cytosine
  methylation status.
XX Claim 1; SEQ ID NO 341614; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
  acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
  and cytosine methylation status in chemically pretreated genomic DNA. The
  oligonucleotides are used for diagnosis and/or prognosis of cancer and a
  range of diseases including immune system, gastrointestinal, respiratory,
  central nervous system, cardiovascular and metabolic disorders. The
  oligomers are also used for detecting cell type differentiation. ABC00010
  -ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
  represent the oligomers described in the invention. NOTE: The sequence
  data for this patent did not form part of the printed specification, but
  was obtained in electronic format from WIPO at
  ftp.wipo.int/pub/published_pct_sequences
XX Sequence 12 BP; 1 A; 0 C; 2 G; 9 T; 0 U; 0 Other;
XX Query Match 14.2%; Score 10.4; DB 1; Length 12;
  Best Local Similarity 91.7%; Pred. No. 8.6e+02;
  Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 907 ATTTTCTTTTGGT 918
  1 ATTTTCTTTTGGT 12
Db
RESULT 423
ID ABI51169
  12 ABI51169 standard; DNA; 12 BP.
AC ABI51169;
  22-FEB-2002 (first entry)
XX Oligonucleotide primer SEQ ID NO 351142 for detecting SNP TSC0047118.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
  peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
  central nervous system; gastrointestinal; respiratory; immune; metabolic.
OS Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.

```

```
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 351142; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 12 BP; 4 A; 0 C; 3 G; 5 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
945 TGGTTTAATGTA 956
|||||
1 TGGTATAATGTA 12
RESULT 424
3170333/c
ABI70333 standard; DNA; 12 BP.
ABI70333;
22-FEB-2002 (first entry)
Oligonucleotide primer SEQ ID NO 370306 for detecting SNP TSC0058109.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
```

```
XX Claim 1; SEQ ID NO 370306; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Sequence 12 BP; 7 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
XX Query Match 14.2%; Score 10.4; DB 1; Length 12;
XX Best Local Similarity 91.7%; Pred. No. 8.6e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 946 GGTTTAATGTA 957
DB 12 GGTTTAATGTA 1
|||||
RESULT 425
ABI60448
ID ABI60448 standard; DNA; 12 BP.
XX AC ABI60448;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide primer SEQ ID NO 360421 for detecting SNP TSC0010752.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 360421; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Sequence 12 BP; 7 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
XX Query Match 14.2%; Score 10.4; DB 1; Length 12;
XX Best Local Similarity 91.7%; Pred. No. 8.6e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 2 A; 0 C; 2 G; 8 T; 0 U; 0 Other;
    Query Match      14.2%; Score 10.4; DB 1; Length 12;
    Best Local Similarity 91.7%; Pred. No. 8.6e+02;
    Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 940 TTCATTGGTTTA 951
Db 1 TTTATTGGTTTA 12
|||||
|

RESULT 426
ABI75562
ID ABI75562 standard; DNA; 12 BP.
XX
AC ABI75562;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 375535 for detecting SNP TSC0061311.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
FN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PT MPI; 2001-657177/75.
XX
PS Set of oligonucleotides, useful for diagnosis and cell typing, is
    designed to detect single-nucleotide polymorphisms and cytosine
    methylation status.
XX
SQ Claim 1; SEQ ID NO 375535; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
    acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
    and cytosine methylation status in chemically pretreated genomic DNA. The
    oligonucleotides are used for diagnosis and/or prognosis of cancer and a
    range of diseases including immune system, gastrointestinal, respiratory,
    central nervous system, cardiovascular and metabolic disorders. The
    oligomers are also used for detecting cell type differentiation. ABC00010
    -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
    represent the oligomers described in the invention. NOTE: The sequence
    data for this patent did not form part of the printed specification, but
    was obtained in electronic format from WIPO at
    ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 3 A; 0 C; 2 G; 7 T; 0 U; 0 Other;
    Query Match      14.2%; Score 10.4; DB 1; Length 12;
    Best Local Similarity 91.7%; Pred. No. 8.6e+02;
    Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 945 TGGTTTAATGTA 956
Db 1 TGGTTTAATTTA 12
|||||
|

RESULT 427
ABH67612/C
ID ABH67612 standard; DNA; 12 BP.
XX
AC ABH67612;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 267589 for detecting SNP TSC0000361.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
FN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PT MPI; 2001-657177/75.
XX
PS Set of oligonucleotides, useful for diagnosis and cell typing, is
    designed to detect single-nucleotide polymorphisms and cytosine
    methylation status.
XX
SQ Claim 1; SEQ ID NO 267589; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
    acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
    and cytosine methylation status in chemically pretreated genomic DNA. The
    oligonucleotides are used for diagnosis and/or prognosis of cancer and a
    range of diseases including immune system, gastrointestinal, respiratory,
    central nervous system, cardiovascular and metabolic disorders. The
    oligomers are also used for detecting cell type differentiation. ABC00010
    -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
    represent the oligomers described in the invention. NOTE: The sequence
    data for this patent did not form part of the printed specification, but
    was obtained in electronic format from WIPO at
    ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 2 A; 2 C; 6 G; 2 T; 0 U; 0 Other;
    Query Match      14.2%; Score 10.4; DB 1; Length 12;
    Best Local Similarity 91.7%; Pred. No. 8.6e+02;
    Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 957 TCGCTACCAACG 968
Db 12 TCGCTACCAACG 1
|||||
|

RESULT 428
ABX03851
ID ABX03851 standard; cDNA; 12 BP.
XX
AC ABX03851;
XX
DT 09-JAN-2003 (first entry)
XX
DE DNA encoding secreted protein signal peptide sequence #60.
XX
KW Differential display method; leucine-rich motif; transmembrane protein;
    secreted protein; secreted protein signal peptide; ss.
```

Unidentified.

WO200259259-A2.

01-AUG-2002.

23-JAN-2002; 2002WO-IL000071.

23-JAN-2001; 2001US-0263158P.

(UYRA-) UNIV RAMOT APPLIED RES & IND DEV LTD.

Wreschner DH;

WPI; 2002-599769/64.

P-PSDB; ABG98380.

Differential display method for identifying secreted or transmembrane protein, comprises contacting a DNA with a first primer that hybridizes to a sequence coding for a leucine-rich motif and with a second oligonucleotide primer.

Disclosure; Fig 2; 37pp; English.

The invention relates to a differential display comprising contacting cDNA with a first primer that hybridizes to an oligonucleic sequence coding for a leucine-rich motif, and with a second oligonucleotide primer to form a cDNA-hybrid molecule. The method comprises obtaining mRNA from at least 2 samples, synthesizing cDNA from the RNA of each sample, contacting the cDNA with a first primer that hybridizes to an oligonucleic sequence coding for a leucine-rich motif, and with a second oligonucleotide primer to form cDNA-hybrid molecules, amplifying the -hybrid molecules, detecting amplified products and comparing the amplified products from each sample to identify distinctive amplified products coding for at least one secreted or transmembrane protein. The method is useful for discovering novel secreted and/or transmembrane proteins which are important for cell processes and play an important role in determining its phenotype, and which act as mediators for the transfer of signals from external environment into the cell itself, thus modulating gene expression. Sequences ABX03792-ABX03869 represent DNA encoding secreted protein signal peptide sequences

Sequence 12 BP; 0 A; 6 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 12;

Best Local Similarity 91.7%; Pred. No. 8.6e+02;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

931 TCCTCTCCTCTTC 942

1 TCCTCTCCTCTTC 12

RESULT 429

IX79961/c

ABX79961 standard; cDNA; 12 BP.

ABX79961;

17-APR-2003 (first entry)

EST polymorphic DNA repeat polynucleotide #286.

EST; expressed sequence tag; ss; polymorphic repeat; tandem repeat; polymorphic marker prediction of ubiquitous simple sequences; POMPOUS; Rep-X; human; genetic disease; drug-treatment; Machado-Joseph; Haw River syndrome; Huntington's disease; fragile-X syndrome; Friedreich's ataxia; myotonic dystrophy; hyperandrogenaemia; spinal atrophy; bulbar atrophy; spinocerebellar ataxia.

Homo sapiens.

PN US6472154-B1.

XX 29-OCT-2002.

XX 31-DEC-1999; 99US-00475947.

XX 31-DEC-1999; 99US-00475947.

XX (TEXA ) UNIV TEXAS SYSTEM.

XX Garner HR, Wren JD, Minna JD, Fondon JW;

XX WPI; 2003-208318/20.

XX Identifying a candidate polymorphic repeat within a coding sequence, for understanding or treating genetic disease, comprises detecting tandem repeats in a target coding sequence and scoring the repeats for polymorphic probability.

XX Example; Col 1137; 588pp; English.

XX The invention discloses a method for identifying a candidate polymorphic repeat within a coding sequence (expressed sequence tag, EST), which comprises detecting tandem repeats in a target coding sequence, scoring the repeats for polymorphic probability and generating a dataset correlating the repeats with polymorphic probability to identify a candidate polymorphic repeat. The computational methods (polymorphic marker prediction of ubiquitous simple sequences, POMPOUS, and Rep-X) are useful for identifying and detecting candidate polymorphic repeats in human genes, which can be used to understand, treat or eliminate genetic diseases, predispositions or adverse drug-treatment reactions. Examples of diseases linked to nucleotide repeats are Machado-Joseph, Haw River syndrome, Huntington's disease, fragile-X syndrome, Friedreich's ataxia, myotonic dystrophy, hyperandrogenaemia, spinal and bulbar atrophy and spinocerebellar ataxia. The sequences presented in ABX79676-ABX80022 are the polymorphic repeats identified for a search of human ESTs

Sequence 12 BP; 6 A; 0 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 12;

Best Local Similarity 91.7%; Pred. No. 8.6e+02;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 931 TCCTCTCCTCTTC 942

12 TCCTCTCCTCTTC 1

RESULT 430

AAQ25461/c

ID AAQ25461 standard; DNA; 13 BP.

XX AAQ25461;

XX 25-MAR-2003 (revised)

DT 07-DEC-1992 (first entry)

XX Purine rich HPV-11 target duplex sequence.

XX Target; Human Papilloma Virus; AIDS; triplex; HIV; herpes; hepatitis; malignancy; ds.

XX Synthetic.

XX WO9209705-A1.

XX 11-JUN-1992.

XX 25-NOV-1991; 91WO-US008811.

XX 23-NOV-1990; 90US-00617907.

XX 18-JAN-1991; 91US-00643382.

XX 08-APR-1991; 91US-00683420.



```

FR 17-APR-1991; 91US-00686544.
FR 17-APR-1991; 91US-00686546.
FR 17-APR-1991; 91US-00686547.
FR 27-SEP-1991; 91US-00766733.
XX (GILE-) GILEAD SCI INC.
XX
XX Froehler B, Krawczyk S, Matteucci MD, Milligan J;
XX WPI; 1992-217083/26.
XX
XX New oligomers contg. modified bases - which form a triplex with G-C
XX doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
XX herpes malignancy and inflammation.
XX
XX Claim 11; Page 63; 77pp; English.
XX
XX The sequence depicts human Papilloma Virus type-11 beginning at
XX nucleotide 927. The sequence is a viral duplex sequence which contains a
XX purine-rich region concentrated on one chain of the duplex. The sequence
XX may be prep'd. by standard DNA synthesis. The HPV duplex sequence is used
XX as a target for novel oligomers which are capable of forming a triplex at
XX physiological pH by coupling into the major groove of the DNA duplex. Two
XX such oligomers HPV201-HPV202 are capable of forming a triplex with this
XX sequence. The oligomers are used in the diagnosis and therapy of HPV
XX infection. Similar oligomers may be used to target viral DNA duplexes
XX specific for HIV, herpes and malignancy. The triple helices form under
XX mild conditions thus assays may be carried out without subjecting the
XX test specimen to harsh conditions. The oligomer is able to inhibit gene
XX expression, as verified by in vitro systems See also AAQ25452-25501 and
XX AAQ30226-448. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 13 BP; 5 A; 0 C; 8 G; 0 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 933 CCTCCTCTTCAT 944
Db 13 CCTCCTCTTCCT 2

RESULT 431
AAT90162/C
ID AAT90162 standard; DNA; 13 BP.
XX AAT90162;
XX
XX 03-DEC-1997 (first entry)
XX
XX Fluorodated peptide nucleic acid probe for wild type cystic fibrosis.
XX
XX Peptide nucleic acid; PNA; probe; cystic fibrosis; separation; detection;
XX wild type; F508; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1 /*tag= a
XX /note= "fluorodated"
XX modified_base 13 /*tag= b
XX /note= "amidated"
XX
XX WO9712995-A1.
XX
XX 10-APR-1997.
XX
XX 04-OCT-1996; 96WO-US015918.
XX
XX 06-OCT-1995; 95US-0004953P.

```

```

XX (PERS-) PERSEPTIVE BIOSYSTEMS INC.
XX Fuchs M, Egholm M, Okeefe H, Yao XW;
XX WPI; 1997-226238/20.
XX
XX Separation and detection of target sequences in mixed nucleic acid sample
XX solutions - by mixing the sample with a labelled PNA probe which has a
XX sequence complementary to at least a portion of the target sequence.
XX
XX Example 7; Page 31; 66pp; English.
XX
XX The present sequence is a fluorodated peptide nucleic acid (PNA) probe
XX for the wild type cystic fibrosis allele F508, which was used in an
XX example of a novel method for separating single stranded nucleic acids
XX from their complementary strands, and detecting a selected target
XX sequence (STG) in a sample. The method comprises mixing the sample with a
XX PNA probe for the STG, to form a detectable duplex, separating the
XX species in the sample and detecting the duplex
XX
XX Sequence 13 BP; 8 A; 3 C; 1 G; 1 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 911 TCTTTGTCCTTT 922
Db 12 TCTTTGTCGTTT 1

RESULT 432
ABC19743/C
ID ABC19743 standard; DNA; 13 BP.
XX ABC19743;
XX
XX 20-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 19760 for detecting SNP TSC0004086.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 19760; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,

```

central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

940 TTCATTGGTTTA 951

|||||

13 TTAATGGTTTA 2

RESULT 433

IC00010

ABC00010 standard; DNA; 13 BP.

ABC00010;

20-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 1 for detecting SNP TSC00000002.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIC-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 1; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;

Best Local Similarity 91.7%; Pred. No. 9e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 940 TTCATTGGTTTA 951

|||||

1 TTAATGGTTTA 12

RESULT 434

ABF50860/c

ID ABF50860 standard; DNA; 13 BP.

XX

AC ABF50860;

XX 21-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 150857 for detecting SNP TSC0038073.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIC-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 150857; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 6 A; 0 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;

Best Local Similarity 91.7%; Pred. No. 9e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 928 TTAATGGTTTCTC 939

|||||

13 TTAATGGTTTCTC 2

RESULT 435

ABH04825/c

ID ABH04825 standard; DNA; 13 BP.

XX

AC ABH04825;

XX 22-FEB-2002 (first entry)

```

XX DE Oligonucleotide SEQ ID NO 204802 for detecting SNP TSC0050236.
XX XX
XX SN: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX XX
XX WO200177384-A2.
XX XX
XX PD 18-OCT-2001.
XX XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX XX
XX PR 07-APR-2000; 2000DE-01019173.
XX XX
XX PA (EPFG-) EPIGENOMICS AG.
XX XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX XX
XX DR WPI; 2001-657177/75.
XX XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX XX
XX PS Claim 1; SEQ ID NO 204802; 29pp + Sequence Listing; German.
XX CC
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX XX
XX SQ Sequence 13 BP; 5 A; 3 C; 1 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 9e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 948 TTTAATGATCG 959
XX Db 12 TGTAATGATCG 1
XX
XX RESULT 436
XX ABC68408
XX ID ABC68408 standard; DNA; 13 BP.
XX AC ABC68408;
XX XX
XX DT 21-FEB-2002 (first entry)
XX XX
XX DE Oligonucleotide SEQ ID NO 68425 for detecting SNP TSC0017839.
XX XX
XX SN: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX XX
XX WO200177384-A2.
XX XX
XX PD 18-OCT-2001.
XX XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX XX
XX SQ Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 9e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 940 TTCATTGGTTTA 951
XX Db 2 TTTATTGGTTTA 13
XX
XX RESULT 437
XX ABF07410/C
XX ID ABF07410 standard; DNA; 13 BP.
XX AC ABF07410;
XX XX
XX DT 21-FEB-2002 (first entry)
XX XX
XX DE Oligonucleotide SEQ ID NO 107407 for detecting SNP TSC0026900.
XX XX
XX SN: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX XX
XX WO200177384-A2.
XX XX
XX PD 18-OCT-2001.
XX XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX XX
XX PR 07-APR-2000; 2000DE-01019173.
XX XX
XX PA (EPFG-) EPIGENOMICS AG.
XX XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX XX
XX DR WPI; 2001-657177/75.
XX XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.

```

Claim 1; SEQ ID NO 107407; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 6 A; 0 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

924 CCTTTATCCCT 935  
||||| |||||  
12 CCTTTAATCCCT 1

RESULT 438  
3F07411  
ABF07411 standard; DNA; 13 BP.  
ABF07411;  
21-FEB-2002 (first entry)  
Oligonucleotide SEQ ID NO 107408 for detecting SNP TSC0026900.  
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.  
Homo sapiens.  
WO200177384-A2.  
18-OCT-2001.  
06-APR-2001; 2001WO-IB000713.  
07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
Claim 1; SEQ ID NO 107408; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but

CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 2 A; 5 C; 0 G; 6 T; 0 U; 0 Other;  
Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 924 CCTTTATCCCT 935  
Db 2 CCTTTAATCCCT 13  
RESULT 439  
ABC09473  
ID ABC09473 standard; DNA; 13 BP.  
XX  
AC ABC09473;  
XX  
DT 20-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 9464 for detecting SNP TSC0002497.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
PN WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 9464; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 2 A; 6 C; 0 G; 5 T; 0 U; 0 Other;  
Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 924 CCTTTATCCCT 935  
Db 1 CCTTTAATCCCT 12

```
RESULT 440
ABF68455/c
ID ABF68455 standard; DNA; 13 BP.
XX AC
XX ABF68455;
XX 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 168452 for detecting SNP TSC0042131.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX PD
XX DT
XX 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 168452 for detecting SNP TSC0042131.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX PD
XX DT
XX 06-APR-2001; 2001WO-IB000713.
XX DE Oligonucleotide SEQ ID NO 219276 for detecting SNP TSC0053323.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX PD
XX DT
XX 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 219276 for detecting SNP TSC0053323.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX PD
XX DT
XX 06-APR-2001; 2001WO-IB000713.
XX DE Oligonucleotide SEQ ID NO 168452; 29pp + Sequence Listing; German.
XX KW This invention describes novel oligonucleotide primers or peptide nucleic
XX KW acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX KW and cytosine methylation status in chemically pretreated genomic DNA. The
XX KW oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX KW range of diseases including immune system, gastrointestinal, respiratory,
XX KW central nervous system, cardiovascular and metabolic disorders. The
XX KW oligomers are also used for detecting cell type differentiation. ABC00010
XX KW -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
XX KW represent the oligomers described in the invention. NOTE: The sequence
XX KW data for this patent did not form part of the printed specification, but
XX KW was obtained in electronic format from WIPO at
XX KW ftp.wipo.int/pub/published_pct_sequences
XX KW
XX KW Sequence 13 BP; 6 A; 3 C; 0 G; 4 T; 0 U; 0 Other;
XX KW
XX KW Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX KW Best Local Similarity 91.7%; Pred. NO. 9e+02;
XX KW Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX KW
XX KW QY 941 TCATTGGTTTAA 952
XX KW Db 13 TAAATGGTTTAA 2
XX KW
XX KW RESULT 441
XX KW ABH19299/c
XX KW ID ABH19299 standard; DNA; 13 BP.
XX KW AC
XX KW ABH19299;
XX KW 22-FEB-2002 (first entry)
XX KW DE Oligonucleotide SEQ ID NO 219276 for detecting SNP TSC0053323.
XX KW KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX KW OS Homo sapiens.
XX KW WO200177384-A2.
XX KW 18-OCT-2001.
XX KW PD
XX KW DT
XX KW 06-APR-2001; 2001WO-IB000713.
XX KW DE Oligonucleotide SEQ ID NO 168452; 29pp + Sequence Listing; German.
XX KW KW This invention describes novel oligonucleotide primers or peptide nucleic
XX KW KW acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX KW KW and cytosine methylation status in chemically pretreated genomic DNA. The
XX KW KW oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX KW KW range of diseases including immune system, gastrointestinal, respiratory,
XX KW KW central nervous system, cardiovascular and metabolic disorders. The
XX KW KW oligomers are also used for detecting cell type differentiation. ABC00010
XX KW KW -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
XX KW KW represent the oligomers described in the invention. NOTE: The sequence
XX KW KW data for this patent did not form part of the printed specification, but
XX KW KW was obtained in electronic format from WIPO at
XX KW KW ftp.wipo.int/pub/published_pct_sequences
XX KW KW
XX KW KW Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
XX KW KW
XX KW KW Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX KW KW Best Local Similarity 91.7%; Pred. NO. 9e+02;
XX KW KW Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX KW KW
XX KW KW QY 948 TTTAATGTTATCG 959
XX KW KW Db 13 TTTAATGTTATG 2
XX KW KW
XX KW KW RESULT 442
XX KW KW ABH35545/c
XX KW KW ID ABH35545 standard; DNA; 13 BP.
XX KW KW AC
XX KW KW ABH35545;
XX KW KW 22-FEB-2002 (first entry)
XX KW KW DE Oligonucleotide SEQ ID NO 235522 for detecting SNP TSC0057502.
XX KW KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX KW KW OS Homo sapiens.
XX KW KW WO200177384-A2.
XX KW KW 18-OCT-2001.
XX KW KW PD
XX KW KW 06-APR-2001; 2001WO-IB000713.
XX KW KW 07-APR-2000; 2000DE-01019173.
XX KW KW (EPiG-) EPIGENOMICS AG.
```

```
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX PD
XX 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPiG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WIPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 219276; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. NO. 9e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 948 TTTAATGTTATCG 959
XX Db 13 TTTAATGTTATG 2
XX
XX RESULT 442
XX ABH35545/c
XX ID ABH35545 standard; DNA; 13 BP.
XX AC
XX ABH35545;
XX 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 235522 for detecting SNP TSC0057502.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX PD
XX 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPiG-) EPIGENOMICS AG.
```

Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
Claim 1; SEQ ID NO 235522; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The range of diseases including immune system, gastrointestinal, respiratory, oligonucleotides are used for diagnosis and/or prognosis of cancer and a central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
Sequence 13 BP; 7 A; 4 C; 0 G; 2 T; 0 U; 0 Other;  
Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02; Mismatches 0; Indels 0; Gaps 0;  
Matches 11; Conservative 0;  
/ 944 TTGGTTTAATGT 955  
12 TTGGTTTAATGT 1  
35ULT 443  
3C44102  
ABC44102 standard; DNA; 13 BP.  
ABC44102;  
21-FEB-2002 (first entry)  
Oligonucleotide SEQ ID NO 44119 for detecting SNP TSC0012979.  
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.  
Homo sapiens.  
WO200177384-A2.  
18-OCT-2001.  
06-APR-2001; 2001WO-IB000713.  
07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
Claim 1; SEQ ID NO 44119; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 945 TCGTTTAATGTA 956  
|||||  
Db 2 TCGTTTAATGTA 13

RESULT 444

ABC44654  
ID ABC44654 standard; DNA; 13 BP.

XX ABC44654;

XX 21-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 44671 for detecting SNP TSC0013085.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX Claim 1; SEQ ID NO 44671; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The range of diseases including immune system, gastrointestinal, respiratory, oligonucleotides are used for diagnosis and/or prognosis of cancer and a central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;







CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

XX  
 SQ Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;  
 Query Match 14.2%; Score 10.4; DB 1; Length 13;  
 Best Local Similarity 91.7%; Pred. No. 9e+02;  
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 945 TGGTTTAATGTA 956  
 ||||| |||||  
 Db 13 TGGTTTATTGTA 2

RESULT 450

ABF23707/c  
 ID ABF23707 standard; DNA; 13 BP.

XX  
 AC ABF23707;

XX  
 DT 21-FEB-2002 (first entry)

XX  
 DE Oligonucleotide SEQ ID NO 123704 for detecting SNP TSC0030930.

XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX  
 CS Homo sapiens.

XX  
 FN WO200177384-A2.

XX  
 PD 18-OCT-2001.

XX  
 PF 06-APR-2001; 2001WO-IB000713.

XX  
 PR 07-APR-2000; 2000DE-01019173.

XX  
 FA (EPIG-) EPIGENOMICS AG.

XX  
 FI Olek A, Piepenbrock C, Berlin K;

XX  
 DR WPI; 2001-657177/75.

XX  
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

XX  
 PS Claim 1; SEQ ID NO 123704; 29pp + Sequence Listing; German.

XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

XX  
 SQ Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
 Best Local Similarity 91.7%; Pred. No. 9e+02;  
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTCTTTGGT 918

Db 13 ATTTTTTGGT 2  
 ||||| |||||

RESULT 451

ABH19336  
 ID ABH19336 standard; DNA; 13 BP.

XX  
 AC ABH19336;

XX  
 DT 22-FEB-2002 (first entry)

XX  
 DE Oligonucleotide SEQ ID NO 219313 for detecting SNP TSC0053330.

XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX  
 OS Homo sapiens.

XX  
 FN WO200177384-A2.

XX  
 PD 18-OCT-2001.

XX  
 PF 06-APR-2001; 2001WO-IB000713.

XX  
 PR 07-APR-2000; 2000DE-01019173.

XX  
 FA (EPIG-) EPIGENOMICS AG.

XX  
 PI Olek A, Piepenbrock C, Berlin K;

XX  
 DR WPI; 2001-657177/75.

XX  
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

XX  
 PS Claim 1; SEQ ID NO 219313; 29pp + Sequence Listing; German.

XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

XX  
 SQ Sequence 13 BP; 5 A; 0 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
 Best Local Similarity 91.7%; Pred. No. 9e+02;  
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 946 GGTTTTAATGTAT 957  
 ||||| |||||

Db 2 GGTTTAAGTAT 13

RESULT 452

ABF73676/c  
 ID ABF73676 standard; DNA; 13 BP.

XX  
 AC ABF73676;

XX  
 DT 22-FEB-2002 (first entry)

XX  
 DE Oligonucleotide SEQ ID NO 173673 for detecting SNP TSC0043251.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

Claim 1; SEQ ID NO 173673; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 6 A; 0 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

924 CCTTTATCCCT 935

||| |||||  
12 CCTCTATCCCT 1

35815

ABF58615 standard; DNA; 13 BP.

ABF58615;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 158612 for detecting SNP TSC0039924.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

PR 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

PA Olek A, Piepenbrock C, Berlin K;

PI WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

XX Claim 1; SEQ ID NO 158612; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 2 A; 8 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 932 CCTCTCTCTTCA 943

||| |||||  
Db 1 CCTCTCTTACA 12

RESULT 454

ABH35606/C

ID ABH35606 standard; DNA; 13 BP.

XX ABH35606;

XX 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 235583 for detecting SNP TSC0057515.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

XX Claim 1; SEQ ID NO 235583; 29pp + Sequence Listing; German.

```

XX SQ Sequence 13 BP; 7 A; 1 C; 3 G; 2 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 939 CTTCAATTCGTTT 950
DB 12 CTTCAATTCGTTT 1
||||| |||||

RESULT 456
ABC50231/c
ID ABC50231 standard; DNA; 13 BP.
XX AC ABC50231;
XX XX
XX XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 50248 for detecting SNP TSC0014136.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX W0200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 50248; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 946 GGTTTAATGAT 957
DB 12 GGTTTAATGAT 1
||||| |||||

RESULT 457

```

F26824  
ABF26824 standard; DNA; 13 BP.  
ABF26824;  
21-FEB-2002 (first entry)  
Oligonucleotide SEQ ID NO 126821 for detecting SNP TSC0031730.  
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.  
Homo sapiens.  
WO200177384-A2.  
18-OCT-2001.  
06-APR-2001; 2001WO-IB000713.  
07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.  
Claim 1; SEQ ID NO 126821; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABF0010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences  
Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;  
Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02; 0; Mismatches 0; Gaps 0;  
Matches 11; Conservative 0; Indels 1; Indels 0; Gaps 0;  
Y 944 TTGGTTTAATGT 955  
b 2 TTGGTTTAATTT 13  
RESULT 458  
BF26825/c  
D ABF26825 standard; DNA; 13 BP.  
X ABF26825;  
X 21-FEB-2002 (first entry)  
X Oligonucleotide SEQ ID NO 126822 for detecting SNP TSC0031730.  
X SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
X peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
X central nervous system; gastrointestinal; respiratory; immune; metabolic.  
X

OS Homo sapiens.  
XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.  
XX Claim 1; SEQ ID NO 126822; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABF0010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences  
XX Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;  
SQ Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02; 0; Mismatches 0; Gaps 0;  
Matches 11; Conservative 0; Indels 1; Indels 0; Gaps 0;  
QY 944 TTGGTTTAATGT 955  
Db 12 TTGGTTTAATTT 1  
RESULT 459  
ABH19298  
ID ABH19298 standard; DNA; 13 BP.  
XX ABH19298;  
XX AC ABH19298;  
XX 22-FEB-2002 (first entry)  
XX Oligonucleotide SEQ ID NO 219275 for detecting SNP TSC0053323.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
PI

XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 219275; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX SQ Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;  
 Query Match 14.2%; Score 10.4; DB 1; Length 13;  
 Best Local Similarity 91.7%; Pred. No. 9e+02;  
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 OY 948 TTTAATGTCG 959  
 Ob 1 TTTAATGTCG 12  
 RESULT 460  
 ABF99636  
 ID ABF99636 standard; DNA; 13 BP.  
 XX AC ABF99636;  
 XX 22-FEB-2002 (first entry)  
 XX Oligonucleotide SEQ ID NO 199633 for detecting SNP TSC0049113.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 199633; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a

CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX SQ Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;  
 Query Match 14.2%; Score 10.4; DB 1; Length 13;  
 Best Local Similarity 91.7%; Pred. No. 9e+02;  
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 OY 943 ATTGGTTTAATG 954  
 Db 2 ATTGGTTTAATG 13  
 RESULT 461  
 ABF50859  
 ID ABF50859 standard; DNA; 13 BP.  
 XX AC ABF50859;  
 XX 21-FEB-2002 (first entry)  
 XX Oligonucleotide SEQ ID NO 150856 for detecting SNP TSC0038073.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 150856; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX SQ Sequence 13 BP; 2 A; 6 C; 0 G; 5 T; 0 U; 0 Other;  
 Query Match 14.2%; Score 10.4; DB 1; Length 13;  
 Best Local Similarity 91.7%; Pred. No. 9e+02;

```
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
      928 TTATCCCTCCTC 939
      ||||| |||||
      1 TTATCCATCCTC 12

RESULT 462
BF50863
) ABF50863 standard; DNA; 13 BP.
)
) ABF50863;
)
) 21-FEB-2002 (first entry)
)
) Oligonucleotide SEQ ID NO 150860 for detecting SNP TSC0038073.
)
) SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
) peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
) central nervous system; gastrointestinal; respiratory; immune; metabolic.
)
) Homo sapiens.
)
) WO200177384-A2.
)
) 18-OCT-2001.
)
) 06-APR-2001; 2001WO-IB000713.
)
) 07-APR-2000; 2000DE-01019173.
)
) (EPIG-) EPIGENOMICS AG.
)
) Olek A, Piepenbrock C, Berlin K;
)
) WPI; 2001-657177/75.
)
) Set of oligonucleotides, useful for diagnosis and cell typing, is
) designed to detect single-nucleotide polymorphisms and cytosine
) methylation status.
)
) Claim 1; SEQ ID NO 150860; 29pp + Sequence Listing; German.
)
) This invention describes novel oligonucleotide primers or peptide nucleic
) acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
) and cytosine methylation status in chemically pretreated genomic DNA. The
) oligonucleotides are used for diagnosis and/or prognosis of cancer and a
) range of diseases including immune system, gastrointestinal, respiratory,
) central nervous system, cardiovascular and metabolic disorders. The
) oligomers are also used for detecting cell type differentiation. ABC00010
) -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
) represent the oligomers described in the invention. NOTE: The sequence
) data for this patent did not form part of the printed specification, but
) was obtained in electronic format from WIPO at
) ftp.wipo.int/pub/published_pct_sequences
)
) Sequence 13 BP; 1 A; 6 C; 1 G; 5 T; 0 U; 0 Other;
)
) This invention describes novel oligonucleotide primers or peptide nucleic
) acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
) and cytosine methylation status in chemically pretreated genomic DNA. The
) oligonucleotides are used for diagnosis and/or prognosis of cancer and a
) range of diseases including immune system, gastrointestinal, respiratory,
) central nervous system, cardiovascular and metabolic disorders. The
) oligomers are also used for detecting cell type differentiation. ABC00010
) -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
) represent the oligomers described in the invention. NOTE: The sequence
) data for this patent did not form part of the printed specification, but
) was obtained in electronic format from WIPO at
) ftp.wipo.int/pub/published_pct_sequences
)
) Sequence 13 BP; 1 A; 6 C; 1 G; 5 T; 0 U; 0 Other;
)
) Query Match 14.2%; Score 10.4; DB 1; Length 13;
) Best Local Similarity 91.7%; Pred. No. 9e+02;
) Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
)
) Y 928 TTATCCCTCCTC 939
) ||||| |||||
) 1 TTATCCCTCCTC 12

RESULT 463
BH61174
D ABE61174 standard; DNA; 13 BP.
X
) C ABE61174;
) X
```

```
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 261151 for detecting SNP TSC0063421.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI WPI; 2001-657177/75.
DR
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
PT
PT Claim 1; SEQ ID NO 261151; 29pp + Sequence Listing; German.
PS
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 1 C; 3 G; 6 T; 0 U; 0 Other;
)
) Query Match 14.2%; Score 10.4; DB 1; Length 13;
) Best Local Similarity 91.7%; Pred. No. 9e+02;
) Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
)
) QY 948 TTAAATGTATCG 959
) ||||| |||||
) Db 2 TTAAATGTATCG 13

RESULT 464
ABC44655/c
ID ABC44655 standard; DNA; 13 BP.
XX
XX ABC44655;
XX
XX 21-FEB-2002 (first entry)
DT
DE Oligonucleotide SEQ ID NO 44672 for detecting SNP TSC0013085.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
PN
XX
PD 18-OCT-2001.
PD
```

```

XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 44672; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 941 TCATTGGTTTAA 952
DB 12 TTATTGGTTTAA 1
RESULT 465
ABC99595/c
ID ABC99595 standard; DNA; 13 BP.
AC ABC99595;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 99612 for detecting SNP TSC0024745.
DE
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
EN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine

```

```

PT methylation status.
XX
PS Claim 1; SEQ ID NO 99612; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 4 C; 0 G; 3 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 945 TGGTTTAAATGTA 956
DB 13 TGGTTTAAATGTA 2
RESULT 466
ABC00011/c
ID ABC00011 standard; DNA; 13 BP.
XX
AC ABC00011;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 2 for detecting SNP TSC00000002.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
EN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 2; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence

```

data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02; Mismatches 0; Indels 0; Gaps 0;  
Matches 11; Conservative 0;

940 TTCAATGGTTTA 951

|||||  
13 TTATTTGGTTTA 2

RESULT 467

ABC36750/c

ABC36750 standard; DNA; 13 BP.

ABC36750;

20-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 36767 for detecting SNP TSC0011511.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 36767; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 8 A; 0 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02; Mismatches 0; Indels 0; Gaps 0;  
Matches 11; Conservative 0;

918 TCCTTGCCTTT 929

|||||  
12 TCCTTGCCTTT 1

RESULT 468

ABF41201/c

ABF41201 standard; DNA; 13 BP.

ABF41201;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 141198 for detecting SNP TSC0035389.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 141198; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02; Mismatches 0; Indels 0; Gaps 0;  
Matches 11; Conservative 0;

943 ATTCGTTTAATG 954

|||||  
12 ATTCGTTTAATG 1

RESULT 469

ABH27936/c

ABH27936 standard; DNA; 13 BP.

ABH27936;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 227913 for detecting SNP TSC0055573.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;



peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.  
Homo sapiens.  
WO200177384-A2.  
18-OCT-2001.  
06-APR-2001; 2001WO-IB000713.  
07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.  
Claim 1; SEQ ID NO 227913; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences  
Sequence 13 BP; 5 A; 0 C; 6 G; 2 T; 0 U; 0 Other;  
Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Q/ 929 TATCCCTCCTCT 940  
D/ 12 TATCACCCTCTCT 1  
RESULT 470  
ABH35607  
ID ABH35607 standard; DNA; 13 BP.  
AC ABH35607;  
XX  
XX 22-FEB-2002 (first entry)  
XX  
XX Oligonucleotide SEQ ID NO 235584 for detecting SNP TSC0057515.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX

(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.  
Claim 1; SEQ ID NO 235584; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences  
Sequence 13 BP; 0 A; 7 C; 0 G; 6 T; 0 U; 0 Other;  
Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Q/ 931 TCCCTCCTCTCTC 942  
D/ 1 TCCCTCCTCTCTC 12  
RESULT 471  
ABH38189  
ID ABH38189 standard; DNA; 13 BP.  
XX  
XX AC ABH38189;  
XX  
XX 22-FEB-2002 (first entry)  
XX  
XX Oligonucleotide SEQ ID NO 238166 for detecting SNP TSC0058074.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX  
XX Claim 1; SEQ ID NO 238166; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 1 A; 5 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02; Mismatches 1; Indels 0; Gaps 0;  
Matches 11; Conservative 0;

934 CTCCTCTTCATT 945

1 CTCCTCTTCATT 12

RESULT 472

ABH47937

ABH47937 standard; DNA; 13 BP.

ABH47937;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 247914 for detecting SNP TSC0060587.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 247914; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 3 A; 7 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02; Mismatches 0; Gaps 0;  
Matches 11; Conservative 0;

QY 932 CCTCTCTTCTCA 943

Db 2 CCCACTCTTCTCA 13

RESULT 473

ABH61175/C

ID ABH61175 standard; DNA; 13 BP.

XX ABH61175;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 261152 for detecting SNP TSC0063421.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX Claim 1; SEQ ID NO 261152; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 6 A; 3 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02; Mismatches 1; Indels 0; Gaps 0;  
Matches 11; Conservative 0;

QY 948 TTTAATGTATCG 959

Db 12 TTTAATGTATCG 1

RESULT 474

ABC34963

ID ABC34963 standard; DNA; 13 BP.

```
XX AC ABC34963;
XX DT 20-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 34980 for detecting SNP TSC0011109.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX FN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX FS Claim 1; SEQ ID NO 34980; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 2 A; 4 C; 0 G; 6 T; 0 U; 1 Other;
XX CC Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX CC Best Local Similarity 91.7%; Pred. No. 9e+02;
XX CC Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX QY 927 TTTATCCTCCTCT 938
XX DB ||||| |||||
XX 2 TTTATCCTCAT 13
XX RESULT 475
XX ABC36751
XX ID ABC36751 standard; DNA; 13 BP.
XX AC ABC36751;
XX DT 20-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 36768 for detecting SNP TSC0011511.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX FN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 2 A; 4 C; 0 G; 6 T; 0 U; 1 Other;
XX CC Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX CC Best Local Similarity 91.7%; Pred. No. 9e+02;
XX CC Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX QY 927 TTTATCCTCCTCT 938
XX DB ||||| |||||
XX 2 TTTATCCTCAT 13
XX RESULT 475
XX ABC36751
XX ID ABC36751 standard; DNA; 13 BP.
XX AC ABC36751;
XX DT 20-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 36768 for detecting SNP TSC0011511.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX FN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 0 A; 5 C; 0 G; 8 T; 0 U; 0 Other;
XX CC Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX CC Best Local Similarity 91.7%; Pred. No. 9e+02;
XX CC Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX QY 918 TCTTTGCCCTTTT 929
XX DB ||||| |||||
XX 2 TCTTTGCCCTTTT 13
XX RESULT 476
XX ABF23706
XX ID ABF23706 standard; DNA; 13 BP.
XX AC ABF23706;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 123703 for detecting SNP TSC0030930.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX FN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
```

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 123703; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

907 ATTTCCTTGGT 918  
|||||  
1 ATTTCCTTGGT 12

RESULT 477  
ABF40512  
ABF40512 standard; DNA; 13 BP.

ABF40512;  
21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 140509 for detecting SNP TSC0035223.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 140509; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

CC oligomers are also used for detecting cell type differentiation. ABC00010  
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 1 A; 0 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTCCTTGGT 918

|||||  
2 ATTTCCTTGGT 13

DB

RESULT 478

ABF99637/C

ID ABF99637 standard; DNA; 13 BP.

XX AC ABF99637;

XX DT 22-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 199634 for detecting SNP TSC0049113.

XX SN; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.

XX Claim 1; SEQ ID NO 199634; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;

Best Local Similarity 91.7%; Pred. No. 9e+02;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;



07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
Claim 1; SEQ ID NO 74770; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
Sequence 13 BP; 9 A; 3 C; 0 G; 1 T; 0 U; 0 Other;  
Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02; Mismatches 0; Gaps 0;  
Matches 11; Conservative 0;  
944 TTGGTTTAATGT 955  
|||||  
13 TTGGTTTAATGT 2  
RESULT 482  
IC50230  
ABC50230 standard; DNA; 13 BP.  
ABC50230;  
21-FEB-2002 (first entry)  
Oligonucleotide SEQ ID NO 50247 for detecting SNP TSC0014136.  
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.  
Homo sapiens.  
WO200177384-A2.  
18-OCT-2001.  
06-APR-2001; 2001WO-IB000713.  
07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

PS Claim 1; SEQ ID NO 50247; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;  
Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02; Mismatches 0; Gaps 0;  
Matches 11; Conservative 0;  
QY 946 GGTTTAATGTAT 957  
Db 2 GGTTTAATTTAT 13  
|||||  
RESULT 483  
ABF09634  
ID ABF09634 standard; DNA; 13 BP.  
XX  
AC ABF09634;  
XX 21-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 109631 for detecting SNP TSC0027422.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
OS  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
PT  
XX  
PS Claim 1; SEQ ID NO 109631; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at

```

CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;

  Query Match      14.2%; Score 10.4; DB 1; Length 13;
  Best Local Similarity 91.7%; Pred. No. 9e+02;
  Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 944 TTGGTTTAATGT 955
Db 1 TTGTTTAATGT 12

RESULT 484
ABF09635/c
ID ABF09635 standard; DNA; 13 BP.
XX
AC ABF09635;
XX
XX 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 109632 for detecting SNP TSC0027422.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 109632; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;

  Query Match      14.2%; Score 10.4; DB 1; Length 13;
  Best Local Similarity 91.7%; Pred. No. 9e+02;
  Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 944 TTGGTTTAATGT 955
Db 13 TTGTTTAATGT 2

RESULT 484
ABF09635/c
ID ABF09635 standard; DNA; 13 BP.
XX
AC ABF09635;
XX
XX 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 109632 for detecting SNP TSC0034209.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 109632; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;

  Query Match      14.2%; Score 10.4; DB 1; Length 13;
  Best Local Similarity 91.7%; Pred. No. 9e+02;
  Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 946 GCCTTAATCATGT 957
Db 1 GGTGTGATGAT 12

RESULT 486
ABF36891/c
ID ABF36891 standard; DNA; 13 BP.
XX
AC ABF36891;
XX
XX 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 136888 for detecting SNP TSC0034103.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

```





CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 4 A; 0 C; 9 G; 0 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
 Best Local Similarity 91.7%; Pred. No. 9e+02;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 931 TCCCTCCTCTTC 942  
 DB 12 TCCCTCCTCTTC 1

RESULT 489

ABH47936/C  
 ID ABH47936 standard; DNA; 13 BP.

XX AC ABH47936;

XX DT 22-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 247913 for detecting SNP TSC0060587.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX CS Homo sapiens.

XX FN WO200177384-A2.

XX FD 18-OCT-2001.

XX FF 06-APR-2001; 2001WO-IB000713.

XX FR 07-APR-2000; 2000DE-01019173.

XX FA (EPIG-) EPIGENOMICS AG.

XX FI Olek A, Piepenbrock C, Berlin K;

XX FX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

XX Claim 1; SEQ ID NO 247913; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX

SQ Sequence 13 BP; 3 A; 0 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;

Best Local Similarity 91.7%; Pred. No. 9e+02;  
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 932 CCTCCTCTCTTC 943  
 DB 12 CCTCCTCTCTTC 1

RESULT 490

ABH50149/C  
 ID ABH50149 standard; DNA; 13 BP.

XX AC ABH50149;

XX DT 22-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 250126 for detecting SNP TSC0061075.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX PN WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX DR WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

XX Claim 1; SEQ ID NO 250126; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX

SQ Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;

Best Local Similarity 91.7%; Pred. No. 9e+02;  
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 941 TCATTGCTTTAA 952  
 DB 13 TCATTGCTTTAA 2

RESULT 491

ABC52085  
 ID ABC52085 standard; DNA; 13 BP.

XX AC ABC52085;

```

1 21-FEB-2002 (first entry)
2
3 Oligonucleotide SEQ ID NO 52102 for detecting SNP TSC0014496.
4
5 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
6 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
7 central nervous system; gastrointestinal; respiratory; immune; metabolic.
8
9 Homo sapiens.
10
11 WO200177384-A2.
12
13 18-OCT-2001.
14
15 06-APR-2001; 2001WO-IB000713.
16
17 07-APR-2000; 2000DE-01019173.
18
19 (EPIC-) EPIGENOMICS AG.
20
21 Olek A, Piepenbrock C, Berlin K;
22 WPI; 2001-657177/75.
23
24 Set of oligonucleotides, useful for diagnosis and cell typing, is
25 designed to detect single-nucleotide polymorphisms and cytosine
26 methylation status.
27
28 Claim 1; SEQ ID NO 52102; 29pp + Sequence Listing; German.
29
30 This invention describes novel oligonucleotide primers or peptide nucleic
31 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
32 and cytosine methylation status in chemically pretreated genomic DNA. The
33 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
34 range of diseases including immune system, gastrointestinal, respiratory,
35 central nervous system, cardiovascular and metabolic disorders. The
36 oligomers are also used for detecting cell type differentiation. ABC00010
37 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI92073
38 represent the oligomers described in the invention. NOTE: The sequence
39 data for this patent did not form part of the printed specification, but
40 was obtained in electronic format from WIPO at
41 ftp.wipo.int/pub/published_pct_sequences
42
43 Sequence 13 BP; 2 A; 4 C; 0 G; 7 T; 0 U; 0 Other;
44
45 Query Match 14.2%; Score 10.4; DB 1; Length 13;
46 Best Local Similarity 91.7%; Pred. No. 9e+02;
47 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0
48
49 Y 934 CTCCTCTTCATT 945
50 |||||||
51 | 1 CTACTCTTCATT 12
52
53 RESULT 492
54 3F07412/C
55 ) ABF07412 standard; DNA; 13 BP.
56
57 X ABF07412;
58
59 X
60 X 21-FEB-2002 (first entry)
61
62 E Oligonucleotide SEQ ID NO 107409 for detecting SNP TSC0026900.
63
64 X SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
65 X peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
66 X central nervous system; gastrointestinal; respiratory; immune; metabolic.
67
68 X Homo sapiens.
69
70 X WO200177384-A2.

```

PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.

XX  
XX Claim 1; SEQ ID NO 9463; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 5 A; 0 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;

Best Local Similarity 91.7%; Pred. No. 9e+02;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 924 CCTTTATCCCT 935

DB 13 CCTTTATCCCT 2

RESULT 494

ABC64765

ID ABC64765 standard; DNA; 13 BP.

XX

XX ABC64765;

XX

XX 21-FEB-2002 (first entry)

XX

XX Oligonucleotide SEQ ID NO 64782 for detecting SNP TSC0017078.

XX

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX

XX 18-OCT-2001.

XX

XX 06-APR-2001; 2001WO-IB000713.

XX

XX 07-APR-2000; 2000DE-01019173.

XX

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX

XX WPI; 2001-657177/75.

XX

XX Set of oligonucleotides, useful for diagnosis and cell typing, is

XX designed to detect single-nucleotide polymorphisms and cytosine

XX methylation status.

XX

XX Claim 1; SEQ ID NO 64782; 29pp + Sequence Listing; German.

XX

XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073

CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 0 A; 5 C; 0 G; 8 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;

Best Local Similarity 91.7%; Pred. No. 9e+02;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 926 TTTTATCCCTCC 937

DB 2 TTTTATCCCTCC 13

RESULT 495

ABC36749

ID ABC36749 standard; DNA; 13 BP.

XX

XX ABC36749;

XX

XX 20-FEB-2002 (first entry)

XX

XX Oligonucleotide SEQ ID NO 36766 for detecting SNP TSC0011511.

XX

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX

XX 18-OCT-2001.

XX

XX 06-APR-2001; 2001WO-IB000713.

XX

XX 07-APR-2000; 2000DE-01019173.

XX

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX

XX WPI; 2001-657177/75.

XX

XX Set of oligonucleotides, useful for diagnosis and cell typing, is

XX designed to detect single-nucleotide polymorphisms and cytosine

XX methylation status.

XX

XX Claim 1; SEQ ID NO 36766; 29pp + Sequence Listing; German.

XX

XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 1 A; 4 C; 0 G; 8 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;

Best Local Similarity 91.7%; Pred. No. 9e+02;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 918 TCTTTGCTTTT 929

DB 11 TCTTTGCTTTT 929



XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX Claim 1; SEQ ID NO 150858; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX Sequence 13 BP; 1 A; 6 C; 0 G; 6 T; 0 U; 0 Other;  
XX  
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;  
XX Best Local Similarity 91.7%; Pred. No. 9e+02;  
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
XX  
XX QY 928 TTATCCCTCCCTC 939  
XX Db 1 TTATCCCTCCCTC 12  
XX  
XX RESULT 499  
XX ABH03631/C  
XX ID ABH03631 standard; DNA; 13 BP.  
XX AC ABH03631;  
XX 22-FEB-2002 (first entry)  
XX  
XX Oligonucleotide SEQ ID NO 203608 for detecting SNP TSC0049987.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX Claim 1; SEQ ID NO 203608; 29pp + Sequence Listing; German.  
XX

CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX Sequence 13 BP; 6 A; 3 C; 0 G; 4 T; 0 U; 0 Other;  
XX  
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;  
XX Best Local Similarity 91.7%; Pred. No. 9e+02;  
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
XX  
XX QY 948 TTTAATGTATCG 959  
XX Db 13 TTTAATGTATAG 2  
XX  
XX RESULT 500  
XX ABH34475/C  
XX ID ABH34475 standard; DNA; 13 BP.  
XX AC ABH34475;  
XX 22-FEB-2002 (first entry)  
XX  
XX Oligonucleotide SEQ ID NO 234452 for detecting SNP TSC0057216.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
XX Claim 1; SEQ ID NO 234452; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX

```

} Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

/ 943 ATTGGTTTAATG 954
|||||
) 12 ATTGTTTAAATG 1

RESULT 501
3F91623/c
) ABF91623 standard; DNA; 13 BP.
) ABF91623;
) 22-FEB-2002 (first entry)
) Oligonucleotide SEQ ID NO 191620 for detecting SNP TSC0001421.
) SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
) peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
) central nervous system; gastrointestinal; respiratory; immune; metabolic.
) Homo sapiens.
) WO200177384-A2.
) 18-OCT-2001.
) 06-APR-2001; 2001WO-IB000713.
) 07-APR-2000; 2000DE-01019173.
) (EPIG-) EPIGENOMICS AG.
) Olek A, Piepenbrock C, Berlin K;
) WPI; 2001-657177/75.
) Set of oligonucleotides, useful for diagnosis and cell typing, is
) designed to detect single-nucleotide polymorphisms and cytosine
) methylation status.
) Claim 1; SEQ ID NO 191620; 29pp + Sequence Listing; German.
) This invention describes novel oligonucleotide primers or peptide nucleic
) acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
) and cytosine methylation status in chemically pretreated genomic DNA. The
) oligonucleotides are used for diagnosis and/or prognosis of cancer and a
) range of diseases including immune system, gastrointestinal, respiratory,
) central nervous system, cardiovascular and metabolic disorders. The
) oligomers are also used for detecting cell type differentiation. ABC00010
) -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
) represent the oligomers described in the invention. NOTE: The sequence
) data for this patent did not form part of the printed specification, but
) was obtained in electronic format from WIPO at
) ftp.wipo.int/pub/published_pct_sequences

} Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

/ 940 TTCATTGGTTTA 951
|||||
) 12 TTCATTGGTTTA 1

RESULT 502
3H56099/c

```

```

ID ABH56099 standard; DNA; 13 BP.
XX AC
XX ABH56099;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 256076 for detecting SNP TSC0062396.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 256076; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 10 A; 2 C; 0 G; 1 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTCCTTTCGT 918
|||||
Db 13 ATTTCCTTTCGT 2

RESULT 503
ABC44103/c
ID ABC44103 standard; DNA; 13 BP.
XX AC
XX ABC44103;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 44120 for detecting SNP TSC0012979.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.

```

```

XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB0000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX PS Claim 1; SEQ ID NO 44120; 29pp + Sequence Listing; German.
XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 9e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 945 TGGTTTAAATGTA 956
XX Db 12 TGGTTTAAATGTA 1
XX
XX RESULT 504
XX ABF11630
XX ID ABF11630 standard; DNA; 13 BP.
XX AC ABF11630;
XX
XX DT 21-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 111627 for detecting SNP TSC0027874.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB0000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX PS Claim 1; SEQ ID NO 111627; 29pp + Sequence Listing; German.
XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 9e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 945 TGGTTTAAATGTA 956
XX Db 12 TGGTTTAAATGTA 1
XX
XX RESULT 504
XX ABF11630
XX ID ABF11630 standard; DNA; 13 BP.
XX AC ABF11630;
XX
XX DT 21-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 111627 for detecting SNP TSC0027874.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB0000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX PS Claim 1; SEQ ID NO 111627; 29pp + Sequence Listing; German.
XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 9e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 920 TTTCGCTTTTAT 931
XX Db 2 TTTCGCTTTTAT 13
XX
XX RESULT 505
XX ABF36473/C
XX ID ABF36473 standard; DNA; 13 BP.
XX AC ABF36473;
XX
XX DT 21-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 136470 for detecting SNP TSC0034103.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB0000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX PS Claim 1; SEQ ID NO 136470; 29pp + Sequence Listing; German.
XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,

```

```

DR WPI; 2001-657177/75.
XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX PS Claim 1; SEQ ID NO 111627; 29pp + Sequence Listing; German.
XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 1 A; 1 C; 2 G; 9 T; 0 U; 0 Other;
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 9e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 920 TTTCGCTTTTAT 931
XX Db 2 TTTCGCTTTTAT 13
XX
XX RESULT 505
XX ABF36473/C
XX ID ABF36473 standard; DNA; 13 BP.
XX AC ABF36473;
XX
XX DT 21-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 136470 for detecting SNP TSC0034103.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB0000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX PS Claim 1; SEQ ID NO 136470; 29pp + Sequence Listing; German.
XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,

```





```

XX DE Oligonucleotide SEQ ID NO 178887 for detecting SNP TSC0044302.
XX XX
XX SN; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX XX
XX WO200177384-A2.
XX XX
XX 18-OCT-2001.
XX PD
XX PF 06-APR-2001; 2001WO-IB000713.
XX XX
XX PR 07-APR-2000; 2000DE-01019173.
XX XX
XX (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX PS Claim 1; SEQ ID NO 178887; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 2 A; 0 C; 4 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 9e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX Q/ 945 TGGTTTAAATGTA 956
XX Db 1 TGGTTTAAATGTA 12
XX
XX RESULT 509
XX ABF85739
XX ID ABF85739 standard; DNA; 13 BP.
XX AC
XX ABF85739;
XX XX
XX 22-FEB-2002 (first entry)
XX DT
XX DE Oligonucleotide SEQ ID NO 185736 for detecting SNP TSC0045780.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX XX
XX WO200177384-A2.
XX PN
XX 18-OCT-2001.
XX XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX PT
XX PT
XX PT

```

```

PF 06-APR-2001; 2001WO-IB000713.
XX XX
XX 07-APR-2000; 2000DE-01019173.
XX XX
XX (EPIG-) EPIGENOMICS AG.
XX PA
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX PT
XX PT
XX PS Claim 1; SEQ ID NO 185736; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 3 A; 3 C; 1 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 9e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX Q/ 942 CATTGGTTTAAAT 953
XX Db 2 CATTGGTTTAAAT 13
XX
XX RESULT 510
XX ABH14931/c
XX ID ABH14931 standard; DNA; 13 BP.
XX AC
XX ABH14931;
XX XX
XX 22-FEB-2002 (first entry)
XX DT
XX DE Oligonucleotide SEQ ID NO 214908 for detecting SNP TSC0052298.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX XX
XX WO200177384-A2.
XX PN
XX 18-OCT-2001.
XX PD
XX PF 06-APR-2001; 2001WO-IB000713.
XX XX
XX 07-APR-2000; 2000DE-01019173.
XX XX
XX (EPIG-) EPIGENOMICS AG.
XX PA
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX PT
XX PT
XX PT

```

Claim 1; SEQ ID NO 214908; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

946 GGTGTTAATGAT 957  
13 GTTTTAATGAT 2

RESULT 511

ABC69764  
ABC69764 standard; DNA; 13 BP.

ABC69764;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 69781 for detecting SNP TSC0018173.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 69781; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but

CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences

SQ Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 943 ATTGTTTAATG 954

1 ATTGTTTAATG 12

RESULT 512

ABC52084/C

ID ABC52084 standard; DNA; 13 BP.

AC ABC52084;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 52101 for detecting SNP TSC0014496.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 52101; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 7 A; 0 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 934 CTCTCTTCATT 945

13 CTCTCTTCATT 2

```

RESULT 513
ABC05074
ID ABC05074 standard; DNA; 13 BP.
XX
AC ABC05074;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 5065 for detecting SNP TSC0001763.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
FN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
FE 06-APR-2001; 2001WO-IB000713.
XX
FR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WIPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
XX
Claim 1; SEQ ID NO 5065; 29pp + Sequence Listing; German.
XX
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 4 G; 5 T; 0 U; 0 Other;
XX
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 946 GGTTTAATGAT 957
DB 1 GGTTTAATGAT 12
XX
RESULT 514
ABF11631/c
ID ABF11631 standard; DNA; 13 BP.
XX
AC ABF11631;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 111628 for detecting SNP TSC0027874.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

```

```

KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WIPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
XX
Claim 1; SEQ ID NO 111628; 29pp + Sequence Listing; German.
XX
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 9 A; 2 C; 1 G; 1 T; 0 U; 0 Other;
XX
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 920 TTTCCTTTTAT 931
DB 12 TTTCGTTTAT 1
XX
RESULT 515
ABC36748/c
ID ABC36748 standard; DNA; 13 BP.
XX
AC ABC36748;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 36765 for detecting SNP TSC0011511.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
FN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.

```

Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
Claim 1; SEQ ID NO 36765; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligonucleotides are also used for detecting cell type differentiation. ABC000010-ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 8 A; 0 C; 4 G; 1 T; 0 U; 0 Other;  
Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

918 TCTTTGCCCTTT 929  
|||||  
12 TCTTTACCTTT 1

RESULT 516  
BH35544  
ABH35544 standard; DNA; 13 BP.  
ABH35544;  
22-FEB-2002 (first entry)  
Oligonucleotide SEQ ID NO 235521 for detecting SNP TSC0057502.  
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.  
Homo sapiens.  
WO200177384-A2.  
18-OCT-2001.  
06-APR-2001; 2001WO-IB000713.  
07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
Claim 1; SEQ ID NO 235521; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC000010-ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 2 A; 0 C; 4 G; 7 T; 0 U; 0 Other;  
SQ Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 944 TTGGTTTAAATGT 955  
|||||  
Db 2 TTGGGTAAATGT 13

RESULT 517  
ABF91622  
ID ABF91622 standard; DNA; 13 BP.  
XX ABF91622;  
XX 22-FEB-2002 (first entry)  
XX Oligonucleotide SEQ ID NO 191619 for detecting SNP TSC0001421.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
XX Claim 1; SEQ ID NO 191619; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC000010-ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 2 A; 0 C; 3 G; 8 T; 0 U; 0 Other;  
SQ

```
Query Match          14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 940 TTCATTGGTTTA 951
DB 2 TTGATTGGTTTA 13

RESULT 518
ABC45674/c
ID ABC45674 standard; DNA; 13 BP.
XX
AC ABC45674;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 45691 for detecting SNP TSC0013289.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 45691; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 0 C; 4 G; 3 T; 0 U; 0 Other;

Query Match          14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 926 TTTTATCCTCC 937
DB 12 TTTTATCCTCC 1

RESULT 519
ABF40513/c
ID ABF40513 standard; DNA; 13 BP.
XX
```

```
AC ABF40513;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 140510 for detecting SNP TSC0035223.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 140510; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 9 A; 3 C; 0 G; 1 T; 0 U; 0 Other;

Query Match          14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTTCTTTGGT 918
DB 12 ATTTTGTTTGGT 1

RESULT 520
ABH23547/c
ID ABH23547 standard; DNA; 13 BP.
XX
AC ABH23547;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 223524 for detecting SNP TSC0010846.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
```

18-OCT-2001.  
06-APR-2001; 2001WO-IB0000713.  
07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.  
Claim 1; SEQ ID NO 223524; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI92073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences  
Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;  
Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
940 TTCATTGGTTTA 951  
|| |||||  
12 TTTATTGGTTTA 1  
RESULT 521  
BH24394  
D ABH24394 standard; DNA; 13 BP.  
K  
C ABH24394;  
X  
T 22-FEB-2002 (first entry)  
X  
E Oligonucleotide SEQ ID NO 224371 for detecting SNP TSC0054668.  
X  
W SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
W peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
W central nervous system; gastrointestinal; respiratory; immune; metabolic.  
X  
S Homo sapiens.  
X  
N WO200177384-A2.  
N  
D 18-OCT-2001.  
D  
X 06-APR-2001; 2001WO-IB0000713.  
X  
R 07-APR-2000; 2000DE-01019173.  
X  
A (EPIG-) EPIGENOMICS AG.  
X  
I Olek A, Piepenbrock C, Berlin K;  
X  
R WPI; 2001-657177/75.  
X

PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 224371; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI92073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;  
SQ  
Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
945 TCGTTTAAATGTA 956  
|| |||||  
1 TGTTTTAAATGTA 12  
Db  
RESULT 522  
ABF55253/c  
ID ABF55253 standard; DNA; 13 BP.  
XX  
AC ABF55253;  
XX  
DT 21-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 155250 for detecting SNP TSC0039210.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
FN WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB0000713.  
XX  
FR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 155250; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI92073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX

CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

XX SQ Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;  
 Query Match 14.2%; Score 10.4; DB 1; Length 13;  
 Best Local Similarity 91.7%; Pred. No. 9e+02;  
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 946 GGTTTAATGAT 957  
 |||||  
 Db 13 GGTTTAATGTTT 2

RESULT 523  
 ABH34474  
 ID ABH34474 standard; DNA; 13 BP.  
 XX AC ABH34474;  
 XX XX  
 DT 22-FEB-2002 (first entry)  
 XX XX  
 DE Oligonucleotide SEQ ID NO 234451 for detecting SNP TSC0057216.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX OS Homo sapiens.  
 XX WO200177384-A2.  
 XX PN 18-OCT-2001.  
 XX PD 06-APR-2001; 2001WO-IB000713.  
 XX PF 07-APR-2000; 2000DE-01019173.  
 XX PR (EPIG-) EPIGENOMICS AG.  
 XX PA Olek A, Piepenbrock C, Berlin K;  
 XX PI WPI; 2001-657177/75.  
 XX DR Set of oligonucleotides, useful for diagnosis and cell typing, is  
 XX PT designed to detect single-nucleotide polymorphisms and cytosine  
 XX PT methylation status.  
 XX PS Claim 1; SEQ ID NO 234451; 29pp + Sequence Listing; German.  
 XX CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

XX SQ Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;  
 Query Match 14.2%; Score 10.4; DB 1; Length 13;  
 Best Local Similarity 91.7%; Pred. No. 9e+02;  
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 943 ATTGGTTTAATG 954  
 |||||  
 Db 13 GGTTTAATGTTT 2

Db |||||  
 2 ATTGGTTTAATG 13

RESULT 524  
 ABH14930  
 ID ABH14930 standard; DNA; 13 BP.  
 XX AC ABH14930;  
 XX XX  
 DT 22-FEB-2002 (first entry)  
 XX XX  
 DE Oligonucleotide SEQ ID NO 214907 for detecting SNP TSC0052298.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX OS Homo sapiens.  
 XX WO200177384-A2.  
 XX PN 18-OCT-2001.  
 XX PD 06-APR-2001; 2001WO-IB000713.  
 XX PF 07-APR-2000; 2000DE-01019173.  
 XX PR (EPIG-) EPIGENOMICS AG.  
 XX PA Olek A, Piepenbrock C, Berlin K;  
 XX PI WPI; 2001-657177/75.  
 XX DR Set of oligonucleotides, useful for diagnosis and cell typing, is  
 XX PT designed to detect single-nucleotide polymorphisms and cytosine  
 XX PT methylation status.  
 XX PS Claim 1; SEQ ID NO 214907; 29pp + Sequence Listing; German.  
 XX CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

XX SQ Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;  
 Query Match 14.2%; Score 10.4; DB 1; Length 13;  
 Best Local Similarity 91.7%; Pred. No. 9e+02;  
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 946 GGTTTAATGAT 957  
 |||||  
 Db 1 GTTTTAATGAT 12

RESULT 525  
 ABH46806/c  
 ID ABH46806 standard; DNA; 13 BP.  
 XX AC ABH46806;  
 XX XX  
 DT 22-FEB-2002 (first entry)  
 XX XX  
 DE Oligonucleotide SEQ ID NO 246783 for detecting SNP TSC0060316.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

Claim 1; SEQ ID NO 246783; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 3 A; 0 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02; Mismatches 0; Indels 1; Gaps 0;  
Matches 11; Conservative 0;

Y 955 TATCGCTACCAA 966

b 12 TATCACTACCAA 1

RESULT 526

BC43329

D ABC43329 standard; DNA; 13 BP.

C ABC43329;

I 21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 43346 for detecting SNP TSC0012831.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

PR 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

PI Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

XX Claim 1; SEQ ID NO 43346; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 2 A; 3 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02; Mismatches 1; Indels 0; Gaps 0;  
Matches 11; Conservative 0;

QY 939 CTTTCATTGCTTT 950

Db 2 CTTTCATTGCTTT 13

RESULT 527

ABC69765/c

ID ABC69765 standard; DNA; 13 BP.

XX ABC69765;

XX 21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 69782 for detecting SNP TSC0018173.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

PF 06-APR-2001; 2001WO-IB000713.

PR 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

XX Claim 1; SEQ ID NO 69782; 29pp + Sequence Listing; German.



XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

CY 943 ATTGTTTAATG 954  
||| ||||| |||||  
DB 13 ATTGTTTAATG 2

RESULT 528  
ABC99594  
ID ABC99594 standard; DNA; 13 BP.  
XX  
AC ABC99594;  
XX  
XX 21-FEB-2002 (first entry)  
XX  
XX Oligonucleotide SEQ ID NO 99611 for detecting SNP TSC0024745.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
XX  
XX Claim 1; SEQ ID NO 99611; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX  
SQ Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 945 TCGTTTAATGTA 956  
||||| |||||  
DB 1 TCGTTTAATGTA 12

RESULT 529  
ABC35286  
ID ABC35286 standard; DNA; 13 BP.  
XX  
XX ABC35286;  
XX  
XX 20-FEB-2002 (first entry)  
XX  
XX Oligonucleotide SEQ ID NO 35303 for detecting SNP TSC0011189.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
XX  
XX Claim 1; SEQ ID NO 35303; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX  
SQ Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 946 GGTTTTAATGTA 957  
||||| |||||  
DB 1 GTTTTAATGTA 12

RESULT 530

```

F040514
ABF40514 standard; DNA; 13 BP.
ABF40514;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 140511 for detecting SNP TSC0035223.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 140511; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 1;
Y 907 ATTTCCTTGGT 918
b 2 ATTTCCTTGGT 13
|||||
RESULT 531
BH19337/c
D ABH19337 standard; DNA; 13 BP.
X ABH19337;
X 22-FEB-2002 (first entry)
X Oligonucleotide SEQ ID NO 219314 for detecting SNP TSC0053330.
X SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
X peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
X central nervous system; gastrointestinal; respiratory; immune; metabolic.
X

F040514
ABF40514 standard; DNA; 13 BP.
ABF40514;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 140511 for detecting SNP TSC0035223.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 219314; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 5 A; 3 C; 0 G; 5 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 1;
QY 946 GGTTCCTTGGT 957
Db 12 GGTTCCTTGGT 1
|||||
RESULT 532
ABF50862/c
ID ABF50862 standard; DNA; 13 BP.
XX AC ABF50862;
XX 21-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 150859 for detecting SNP TSC0038073.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;

```



```
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
    945 TGGTTTAATGTA 956
    ||||| |||
    13 TGGTTTAATGTA 2

RESULT 535
ABF85738/c
ABF85738 standard; DNA; 13 BP.
ABF85738;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 185735 for detecting SNP TSC0045780.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 185735; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI02073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 6 A; 1 C; 3 G; 3 T; 0 U; 0 Other;
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI02073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 6 A; 1 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Y 942 CATTGTTTAAT 953
||| |||||
12 CATTGTTTAAT 1

RESULT 536
BH38188/c
BH38188 standard; DNA; 13 BP.
X ABH38188
X ABH38188;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Y 942 CATTGTTTAAT 953
||| |||||
12 CATTGTTTAAT 1

RESULT 537
ABH45261
ABH45261 standard; DNA; 13 BP.
X ABH45261;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 245238 for detecting SNP TSC0005865.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 238165; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI02073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 7 A; 0 C; 5 G; 1 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Y 934 CTCCTCTTCATT 945
||| |||||
13 CTCCTCTTCATT 2
```



data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 3 A; 4 C; 0 G; 6 T; 0 U; 0 Other;  
Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

926 TTTTATCCCTCC 937  
|||||  
2 TTTTATCTCC 13

RESULT 540

ABC74752 standard; DNA; 13 BP.

ABC74752;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 74769 for detecting SNP TSC0019203.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 74769; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 1 A; 0 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

944 TTGGTTTATGCT 955

|||||

1 TTGGTTTATGCT 12

RESULT 541

ABC34962/c

ABC34962;

20-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 34979 for detecting SNP TSC0011109.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 34979; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 6 A; 0 C; 4 G; 2 T; 0 U; 1 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

927 TTTATCCCTCCT 938

|||||

12 TTTATCCCTCAT 1

RESULT 542

ABC35287/c

ABC35287;

20-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 35304 for detecting SNP TSC0011189.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 OS Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 35304; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 XX Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;  
 Query Match 14.2%; Score 10.4; DB 1; Length 13;  
 Best Local Similarity 91.7%; Pred. No. 9e+02;  
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 946 GGTTTAATGTAT 957  
 Db 13 GTTTTAATGTAT 2  
 RESULT 543  
 ABF41200  
 ID ABF41200 standard; DNA; 13 BP.  
 XX  
 XX AC ABF41200;  
 XX 21-FEB-2002 (first entry)  
 DE Oligonucleotide SEQ ID NO 141197 for detecting SNP TSC0035389.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX

PA (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 141197; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 XX Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;  
 Query Match 14.2%; Score 10.4; DB 1; Length 13;  
 Best Local Similarity 91.7%; Pred. No. 9e+02;  
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 943 ATTGGTTTAATG 954  
 Db 2 ATTTGTTTAATG 13  
 RESULT 544  
 ABF68454  
 ID ABF68454 standard; DNA; 13 BP.  
 XX  
 XX AC ABF68454;  
 XX 22-FEB-2002 (first entry)  
 DT Oligonucleotide SEQ ID NO 168451 for detecting SNP TSC0042131.  
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 168451; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

941 TCATTGGTTTAA 952

1 TAATTGGTTTAA 12

RESULT 545

3F95990/C  
ABF95990 standard; DNA; 13 BP.

ABF95990;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 195987 for detecting SNP TSC0048213.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 195987; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 4 A; 0 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 932 CCTCTCTCTTCA 943

Db 12 CCTCATCTTCA 1

RESULT 546

ABF95991  
ID ABF95991 standard; DNA; 13 BP.

AC ABF95991;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 195988 for detecting SNP TSC0048213.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 195988; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 2 A; 7 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 932 CCTCTCTCTTCA 943

Db 2 CCTCATCTTCA 13

RESULT 547

ABF95994/C  
ID ABF95994 standard; DNA; 13 BP.



```

XX ABF95994;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 195991 for detecting SNP TSC0048213.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 195991; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 4 A; 1 C; 7 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 9e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 932 CCCTCCCTCTCA 943
XX ||||| |||||
XX 12 CCCTCGCTCTCA 1
XX
XX RESULT 548
XX ABH23546
XX ID ABH23546 standard; DNA; 13 BP.
XX
XX AC ABH23546;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 223523 for detecting SNP TSC0010846.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX

```

```

PN WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 223523; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 9e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 940 TTCATTGCTTTA 951
XX ||||| |||||
XX 2 TTTATTGCTTTA 13
XX
XX RESULT 549
XX ABF73677
XX ID ABF73677 standard; DNA; 13 BP.
XX
XX AC ABF73677;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 173674 for detecting SNP TSC0043251.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX

```

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 173674; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 1 A; 6 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

924 CCTTTATCCCT 935  
||| |||||  
2 CCTTTATCCCT 13

RESULT 550

ABH00190  
ABH00190 standard; DNA; 13 BP.

ABH00190;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 200167 for detecting SNP TSC0049250.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 200167; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences

SQ Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 941 TCATTGGTTAA 952

1 TTATTGGTTAA 12

RESULT 551

ABH00191/c

ID ABH00191 standard; DNA; 13 BP.

AC ABH00191;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 200168 for detecting SNP TSC0049250.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 200168; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

SQ Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;



07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
Claim 1; SEQ ID NO 107410; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
Sequence 13 BP; 1 A; 6 C; 0 G; 6 T; 0 U; 0 Other;  
Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02; Mismatches 0; Gaps 0;  
Matches 11; Conservative 0; Indels 1; Indels 0; Gaps 0;  
Y 924 CCTTTATCCCT 935  
D 2 CCTTTCATCCCT 13  
RESULT 555  
BF95995  
D ABF95995 standard; DNA; 13 BP.  
X ABF95995;  
X ABF95995;  
X 22-FEB-2002 (first entry)  
X Oligonucleotide SEQ ID NO 195992 for detecting SNP TSC0048213.  
X SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
W peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
W central nervous system; gastrointestinal; respiratory; immune; metabolic.  
X Homo sapiens.  
S WO200177384-A2.  
N 18-OCT-2001.  
X 06-APR-2001; 2001WO-IB000713.  
X 07-APR-2000; 2000DE-01019173.  
X (EPIG-) EPIGENOMICS AG.  
X Olek A, Piepenbrock C, Berlin K;  
X WPI; 2001-657177/75.  
X Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

PS Claim 1; SEQ ID NO 195992; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
XX Sequence 13 BP; 1 A; 7 C; 1 G; 4 T; 0 U; 0 Other;  
SQ Query Match 14.2%; Score 10.4; DB 1; Length 13;  
Best Local Similarity 91.7%; Pred. No. 9e+02; Mismatches 0; Gaps 0;  
Matches 11; Conservative 0; Indels 1; Indels 0; Gaps 0;  
QY 932 CCTCTCTCTCA 943  
DB 2 CCTCTCTCTCA 13  
RESULT 556  
ABH03630  
ID ABH03630 standard; DNA; 13 BP.  
XX ABH03630;  
XX 22-FEB-2002 (first entry)  
XX Oligonucleotide SEQ ID NO 203607 for detecting SNP TSC0049987.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
OS WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
XX Claim 1; SEQ ID NO 203607; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

```
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 948 TTTAATGATCG 959
Db 1 TTTAATGATAG 12

RESULT 557
ABF55252
ID ABF55252 standard; DNA; 13 BP.
XX
AC ABF55252;
XX
PT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 155249 for detecting SNP TSC0039210.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
XX
Claim 1; SEQ ID NO 155249; 29pp + Sequence Listing; German.
XX
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 0 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 946 GGTTTAATGAT 957
Db 1 GGTTTAATGTTT 12

RESULT 559
ABH50148
ID ABH50148 standard; DNA; 13 BP.
XX
AC ABH50148;
XX
PT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 250125 for detecting SNP TSC0061075.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
```

```
RESULT 558
ABH42354
ID ABH42354 standard; DNA; 13 BP.
XX
AC ABH42354;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 242331 for detecting SNP TSC0059098.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
XX
Claim 1; SEQ ID NO 242331; 29pp + Sequence Listing; German.
XX
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 945 TGGTTTAAATGTA 956
Db 1 TGGTTTAAATGTA 12

RESULT 559
ABH50148
ID ABH50148 standard; DNA; 13 BP.
XX
AC ABH50148;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 250125 for detecting SNP TSC0061075.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
```

```

1 Homo sapiens.
2 WO200177384-A2.
3 18-OCT-2001.
4
5 06-APR-2001; 2001WO-IB000713.
6
7 07-APR-2000; 2000DE-01019173.
8 (EPIG-) EPIGENOMICS AG.
9
10 Olek A, Piepenbrock C, Berlin K;
11 WPI; 2001-657177/75.
12
13 Set of oligonucleotides, useful for diagnosis and cell typing, is
14 designed to detect single-nucleotide polymorphisms and cytosine
15 methylation status.
16
17 Claim 1; SEQ ID NO 250125; 29pp + Sequence Listing; German.
18
19 This invention describes novel oligonucleotide primers or peptide nucleic
20 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
21 and cytosine methylation status in chemically pretreated genomic DNA. The
22 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
23 range of diseases including immune system, gastrointestinal, respiratory,
24 central nervous system, cardiovascular and metabolic disorders. The
25 oligomers are also used for detecting cell type differentiation. ABC00010
26 -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABT00010-ABT9989
27 represent the oligomers described in the invention. NOTE: The sequence
28 data for this patent did not form part of the printed specification, but
29 was obtained in electronic format from WIPO at
30 ftp.wipo.int/pub/published_pct_sequences
31
32 Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;
33
34 Query Match 14.2%; Score 10.4; DB 1; Length 13;
35 Best Local Similarity 91.7%; Pred. No. 9e+02;
36 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
37
38 Y 941 TCATTGGTTTAA 952
39 b 1 TTATTGGTTTAA 12
40
41 RESULT 560
42 AQ35696
43 D AAQ35696 standard; DNA; 15 BP.
44 X
45 C AAQ35696;
46 X
47 T 25-MAR-2003 (revised)
48 T 24-FEB-1993 (first entry)
49 X
50 X Cloning site production oligo IBERL3.
51 X
52 W NVVAC; recombinant; bovine herpesvirus; type 1; BHV1; vaccinia virus;
53 W Copenhagen vaccine; virulence factors; deletion loci; recipient loci;
54 W gIV; flanking arms; Pi promoter; GI; H6 promoter; gIII; I3L promoter;
55 W monoclonal antibodies; Vero cells; ss.
56 X
57 S Synthetic.
58 X
59 N WO9215672-A1.
60 X
61 D 17-SEP-1992.
62 X
63 X 09-MAR-1992; 92WO-US001906.
64 F
65 X 07-MAR-1991; 91US-00666056.
66 R
67 R 11-JUN-1991; 91US-00713967.
68

```

---

```

PR 06-MAR-1992; 92US-00847951.
XX (VIRO-) VIROGENETICS CORP.
XX
XX Paoletti E, Perkus ME, Taylor J, Tartaglia J, Norton EK;
XX Riviere M, De Taisne C, Limbach KJ, Johnson GP, Pincus SE, Cox WI;
XX Francis J, Gettig RR;
XX WPI; 1992-331718/40.
XX
XX Vaccine comprises recombinant, attenuated pox-virus - use for vaccinating
XX against viral infections such as rabies, hepatitis B, HIV, HSV, EBV, CMV,
XX mumps etc.
XX
XX Disclosure; Page 194; 456pp; English.
XX
XX The sequences given in AAQ35691-703 were used in the construction of
XX NVVAC recombinants expressing the bovine herpesvirus type 1 BHV1 genes.
XX NVVAC is a Copenhagen vaccine strain of vaccinia virus which has been
XX modified by deletion of six non-essential regions of the genome encoding
XX known or potential virulence factors. The deletion loci were engineered
XX as recipient loci for the insertion of foreign genes. The BHV1 gIV was
XX cloned into the vaccinia virus flanking arms and the Pi promoter was
XX cloned upstream of the gIV gene. The gI gene was cloned and placed in
XX operative conjunction with the H6 promoter. The NVVAC transformant
XX containing the gIV and gI genes were used to produce gIV and gI-specific
XX monoclonal antibodies, as the proteins are expressed on the cell surface.
XX The gIII gene was inserted into NVVAC in a separate experiment and placed
XX under the control of the I3L promoter. gIII-specific antibodies were also
XX produced after expression of the gene in transformed Vero cells. Further
XX NVVAC recombinants could be produced containing the BHV1 gIII and gI
XX genes, and the triple recombinant containing the gI, gIII and gIV genes.
XX See also AAQ35501-864. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 15 BP; 4 A; 3 C; 3 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 15;
XX Best Local Similarity 91.7%; Pred. No. 9.8e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 945 TGGTTTAAATGTA 956
XX Db 4 TGGTTTAAATGCA 15
XX
XX RESULT 561
XX AAQ54837/C
XX ID AAQ54837 standard; DNA; 15 BP.
XX
XX AC AAQ54837;
XX
XX DT 25-MAR-2003 (revised)
XX DT 19-JUL-1994 (first entry)
XX
XX DE Sequence of oligo corresp. to WZ7.
XX XW Z7; oligo; hybrid arrest assay; ss.
XX
XX OS Synthetic.
XX
XX PN WO9400590-A1.
XX
XX PD 06-JAN-1994.
XX
XX PF 22-JUN-1993; 93WO-US005965.
XX
XX PR 23-JUN-1992; 92US-00904072.
XX PR 21-JUN-1993; 93US-00080386.
XX
XX PA (UVNY ) UNIV NEW YORK MT SINAI SCHOOL MEDICINE.
XX
XX FI Sealfon SC;
XX

```

WPI; 1994-026225/03.

Gonadotropin-releasing hormone receptor genes and proteins - for expression of GnRH and screening and identifying GnRH (ant)agonists, for diagnosis and therapy of reproductive disorders and for contraception.

Example; Page 29; 73pp; English.

The example describes the cloning of a cDNA representing the mouse gonadotropin-releasing hormone receptor (GnRH-R) and confirming its identity using Xenopus oocyte expression. Subclones for hybrid arrest screening were isolated using PCR with a variety of degenerate oligos corresp. to conserved transmembrane domains of the GPR superfamily. The oligos used to isolate the gp. of subclones including WZ7, modified from sequences of published oligos, corresp. to transmembrane III (AAQ54834) and transmembrane VI (AAQ54835). PCR was performed, and a portion restriction digested, subcloned and sequenced. For hybrid-arrest assay, an antisense oligo corresp. to transmembrane II of the 5HT10 receptor, and an oligo corresp. to WZ7 were synthesised. (Updated on 25-MAR-2003 to correct PN field.)

Sequence 15 BP; 5 A; 1 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;

Best Local Similarity 91.7%; Pred. No. 9.8e+02;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 933 CCTCTCTTCAT 944

DB 15 CCTCTCTTCAT 4

RESULT 562

AAT54622

ID AAT54622 standard; RNA; 15 BP.

AC AAT54622;

XX

DT 25-MAR-2003 (revised)

DT 22-APR-1997 (first entry)

XX

DE Mouse IL-5 hammerhead ribozyme target sequence (nt. position 839).

XX

KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; Philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS; ss.

XX

CS Mus musculus.

XX

PN W09523225-A2.

XX

PD 31-AUG-1995.

XX

PF 23-FEB-1995; 95WO-IB000156.

XX

FR 23-FEB-1994; 94US-00201109.

FR 29-MAR-1994; 94US-00218934.

FR 04-APR-1994; 94US-00222795.

FR 07-APR-1994; 94US-00224483.

FR 15-APR-1994; 94US-00227958.

FR 15-APR-1994; 94US-00228041.

FR 18-MAY-1994; 94US-00245736.

FR 06-JUL-1994; 94US-00271280.

FR 15-AUG-1994; 94US-00291932.

FR 16-AUG-1994; 94US-00291433.

PR 17-AUG-1994; 94US-00292620.

PR 19-AUG-1994; 94US-00293520.

PR 02-SEP-1994; 94US-00300000.

PR 08-SEP-1994; 94US-00303039.

PR 23-SEP-1994; 94US-00311486.

PR 23-SEP-1994; 94US-00311749.

PR 28-SEP-1994; 94US-00314397.

PR 03-OCT-1994; 94US-00316771.

PR 07-OCT-1994; 94US-00319492.

PR 11-OCT-1994; 94US-00321993.

PR 04-NOV-1994; 94US-00334847.

PR 10-NOV-1994; 94US-00337608.

PR 28-NOV-1994; 94US-00345516.

PR 16-DEC-1994; 94US-00357577.

PR 23-DEC-1994; 94US-00363233.

PR 30-JAN-1995; 95US-00380734.

XX

PA (RIBO-) RIBOZYME PHARM INC.

XX

PI Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW; Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA; Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD; Tracz D, Usman N, Wincott FE, Woolf T;

PI

XX WPI; 1995-351090/45.

DR

XX

PT Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.

PT

XX

PS Claim 2; Page 221; 407pp; English.

XX

CC The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-5) mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the IL-5 target sequences and thereby inhibit IL-5 expression, making them useful for treating chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes and preventing the recruitment and activation of eosinophils. The ribozymes can also be used to treat eosinophilia (related to parasitic infection or with pulmonary infiltration) and L-tryptophan-associated eosinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct PI field.)

CC

SQ Sequence 15 BP; 2 A; 5 C; 2 G; 0 T; 6 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;

Best Local Similarity 41.7%; Pred. No. 9.8e+02;

Matches 5; Conservative 6; Mismatches 1; Indels 0; Gaps 0;

QY 935 TCCTCTTCATG 946

DB 2 UCCUCUUGUUG 13

RESULT 563

AAT54624

ID AAT54624 standard; RNA; 15 BP.

XX

AC AAT54624;

XX

DT 25-MAR-2003 (revised)

DT 22-APR-1997 (first entry)

XX

DE Mouse IL-5 hammerhead ribozyme target sequence (nt. position 840).

XX

KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;

translocation; chronic myelogenous leukaemia; CML; cancer;  
Philadelphia chromosome; inflammation; autoimmune disease;  
atherosclerosis; myocardial infarction; stroke; retinosis;  
transplant rejection; rheumatoid arthritis; psoriasis;  
myocardial ischaemia; Kawasaki disease; septic shock; HIV;  
human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;  
ss.  
Mus musculus.  
WO9523225-A2.  
31-AUG-1995.  
23-FEB-1995; 95WO-IB000156.  
23-FEB-1994; 94US-00201109.  
29-MAR-1994; 94US-00218934.  
04-APR-1994; 94US-00222795.  
07-APR-1994; 94US-00224483.  
15-APR-1994; 94US-00227958.  
15-APR-1994; 94US-00228041.  
18-MAY-1994; 94US-00245736.  
06-JUL-1994; 94US-00271280.  
15-AUG-1994; 94US-00291932.  
16-AUG-1994; 94US-00291433.  
17-AUG-1994; 94US-00292620.  
19-AUG-1994; 94US-00293520.  
02-SEP-1994; 94US-00300000.  
08-SEP-1994; 94US-00303039.  
23-SEP-1994; 94US-00311486.  
23-SEP-1994; 94US-00311749.  
28-SEP-1994; 94US-00314397.  
03-OCT-1994; 94US-00316771.  
07-OCT-1994; 94US-00319492.  
11-OCT-1994; 94US-00321993.  
04-NOV-1994; 94US-00334847.  
10-NOV-1994; 94US-00337608.  
28-NOV-1994; 94US-00345516.  
16-DEC-1994; 94US-00357577.  
23-DEC-1994; 94US-00363233.  
30-JAN-1995; 95US-00380734.  
(RIBO-) RIBOZYME PHARM INC.  
A Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;  
Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;  
Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;  
Tracz D, Usman N, Wincott FE, Woolf T;  
WPI; 1995-351090/45.  
Ribozymes having modified bases and methods for producing them - for use  
in inhibiting disease related genes.  
Claim 2; Page 221; 407pp; English.  
The present sequence represents a preferred target sequence for an  
enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-  
5) mRNA at the nucleotide base position indicated in the DE line. Regions  
of the mRNA that do not form secondary folding structures and that  
contain potential hammerhead and hairpin ribozyme cleavage sites were  
identified by computer analysis. Ribozymes directed against these mRNA  
sequences were designed and synthesised with modifications that improve  
their nuclease resistance. The ribozymes cleave the IL-5 target sequences  
and thereby inhibit IL-5 expression, making them useful for treating  
chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes  
and preventing the recruitment and activation of eosinophils. The  
ribozymes can also be used to treat eosinophilia (related to parasitic  
infection or with pulmonary infiltration) and L-tryptophan-associated  
eosinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct PI  
field.)

SQ Sequence 15 BP; 1 A; 5 C; 2 G; 0 T; 7 U; 0 Other;  
Query Match 14.2%; Score 10.4; DB 1; Length 15;  
Best Local Similarity 41.7%; Pred. No. 9.8e+02;  
Matches 5; Conservative 6; Mismatches 1; Indels 0; Gaps 0;  
QY 935 TCCTCTTCATTG 946  
:|:|:|:|:|:|:  
Db 1 UCCUCUCUGGUG 12  
RESULT 564  
AAT33389  
ID AAT33389 standard; cDNA; 15 BP.  
XX  
AC AAT33389;  
XX  
DT 16-MAY-1997 (first entry)  
XX  
DE Human vascular endothelial growth factor antisense oligonucleotide.  
XX  
KW Antisense; VEGF; vascular endothelial growth factor; hypoxia;  
neovascularisation; angiogenesis; metastasis; retinopathy; macular;  
degeneration; expression inhibitor; ss.  
XX  
OS Synthetic.  
XX  
PN WO9627006-A2.  
XX  
PD 06-SEP-1996.  
XX  
PF 29-FEB-1996; 96WO-US002840.  
XX  
PR 02-MAR-1995; 95US-00398945.  
PR 08-DEC-1995; 95US-00569926.  
XX  
PA (HYBR-) HYBRIDON INC.  
XX  
PI Robinson GS;  
XX  
DR WPI; 1996-412773/41.  
XX  
PT Human vascular endothelial growth factor anti-sense oligonucleotide -  
inhibits the expression of VEGF, useful in treatment of hypoxia induced  
neovascularisation and angiogenesis associated disease states.  
XX  
PS Claim 20; Page 52; 92pp; English.  
XX  
CC AAT33371-T33431 are antisense oligonucleotides used to inhibit the  
expression of human vascular endothelial growth factor (VEGF). The  
synthetic oligonucleotides contain phosphorothioate linkages and  
essentially consist of 2'-O-alkylated ribonucleotides. Inhibiting the  
expression of VEGF is useful in the treatment of hypoxia induced  
neovascularisation and angiogenesis associated disease states.  
CC  
CC retinopathy of prematurity, diabetic retinopathy and age related macular  
degeneration  
XX  
SQ Sequence 15 BP; 0 A; 7 C; 1 G; 7 T; 0 U; 0 Other;  
Query Match 14.2%; Score 10.4; DB 1; Length 15;  
Best Local Similarity 91.7%; Pred. No. 9.8e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 934 CTCCTCTTCATT 945  
|||:|:|:|:|:  
Db 3 CTCCTCTTCCTT 14  
RESULT 565  
AAT48404  
ID AAT48404 standard; DNA; 15 BP.  
XX  
AC AAT48404;



XX DT 11-MAR-1997 (first entry)  
 XX XX  
 DE Oligonucleotide H-9A specific for human VEGF nucleic acid.  
 XX XX  
 KW Vascular endothelial growth factor; inhibition; decrease; antisense;  
 KW neovascularisation; retinopathy; age-related macular degeneration;  
 KW diabetes; ss.  
 XX OS Synthetic.  
 XX XX  
 EN WO9623065-A2.  
 XX XX  
 PD 01-AUG-1996.  
 XX XX  
 PF 26-JAN-1996; 96WO-US001189.  
 XX XX  
 PR 26-JAN-1995; 95US-00378860.  
 XX XX  
 PA (HYBR-) HYBRIDON INC.  
 PA (CHIL-) CHILDRENS MEDICAL CENT.  
 XX XX  
 PI Robinson GS, Smith LEH;  
 XX XX  
 DR WPI; 1996-362689/36.  
 XX XX  
 PT Inhibiting neovascularisation using VEGF-specific oligo:nucleotide(s) -  
 PT for treatment of retinopathies and age-related macular degeneration.  
 XX XX  
 PS Disclosure; Page 12; 66pp; English.  
 XX XX  
 CC Neovascularisation can be reduced by blocking vascular endothelial growth  
 CC factor (VEGF) expression using a synthetic oligonucleotide specific for  
 CC VEGF. Inhibiting neovascularisation is useful for treatment of  
 CC retinopathy of prematurity, diabetic retinopathy and age-related macular  
 CC degeneration. The present sequence is an example of a suitable  
 CC oligonucleotide specific for human VEGF  
 XX XX  
 SQ Sequence 15 BP; 0 A; 7 C; 1 G; 7 T; 0 U; 0 Other;  
 Query Match 14.2%; Score 10.4; DB 1; Length 15;  
 Best Local Similarity 91.7%; Pred. No. 9.8e+02;  
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 C Y 934 CTCCTCTTCATT 945  
 D b 3 CTCCTCTTCCTT 14  
 RESULT 566  
 AAT37305/C  
 ID AAT37305 standard; DNA; 15 BP.  
 XX XX  
 AC AAT37305;  
 XX XX  
 DT 04-DEC-1996 (first entry)  
 XX XX  
 DE GnRH receptor clone WZ7 antisense oligonucleotide.  
 XX XX  
 KW Gonadotropin-releasing hormone receptor; GnRH-R; G-protein receptor;  
 KW signal transduction; reproduction; contraception; diagnosis; therapy;  
 KW polymerase chain reaction; PCR; primer; antisense; ss.  
 XX OS Synthetic.  
 XX XX  
 EN WO9625423-A1.  
 XX XX  
 PJ 22-AUG-1996.  
 XX XX  
 PF 26-JAN-1996; 96WO-US001034.  
 XX XX  
 PR 17-FEB-1995; 95US-00390000.  
 XX XX

PA (MOUN ) MOUNT SINAI SCHOOL MEDICINE.  
 XX XX  
 PI Sealfon SC;  
 XX XX  
 DR WPI; 1996-393334/39.  
 XX XX  
 PT Identifying modulators of gonadotropin-releasing hormone receptor -  
 PT including new anti-sense oligo:nucleotide(s) and antibodies, useful e.g.  
 PT for contraception or diagnosis and treatment of reproductive disorders.  
 XX XX  
 PS Example 6; Page 43; 76pp; English.  
 XX XX  
 CC An antisense oligonucleotide (AAT37305) is based on clone WZ7 (see also  
 CC AAT37302-03), derived from mouse gonadotrope alpha-T3-1 cells. In a  
 CC hybrid-arrest assay, the WZ7 antisense oligo was co-injected with alpha-  
 CC T3-1 and rat brain RNA into Xenopus oocytes. It completely abolished  
 CC expression of the gonadotropin-releasing hormone receptor (GnRH-R) in  
 CC the oocytes but did not affect expression of the brain 5HT1C receptor.  
 CC WZ7 was used as a probe to isolate a cDNA clone (AAT37306) coding for  
 CC murine GnRH-R (AAW03995)  
 XX XX  
 SQ Sequence 15 BP; 5 A; 1 C; 7 G; 2 T; 0 U; 0 Other;  
 Query Match 14.2%; Score 10.4; DB 1; Length 15;  
 Best Local Similarity 91.7%; Pred. No. 9.8e+02;  
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Q Y 933 CCTCCTCTTCAT 944  
 D b 15 CCTCCTCATCAT 4  
 RESULT 567  
 AAX75708  
 ID AAX75708 standard; RNA; 15 BP.  
 XX XX  
 AC AAX75708;  
 XX XX  
 DT 28-JUL-1999 (first entry)  
 XX XX  
 DE Human flt-1 and KDR hammerhead ribozyme target site #42.  
 XX XX  
 KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;  
 KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;  
 KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;  
 KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;  
 KW foetal liver kinase 1; ss.  
 XX OS Homo sapiens.  
 XX XX  
 EN WO9715662-A2.  
 XX XX  
 PD 01-MAY-1997.  
 XX XX  
 PF 25-OCT-1996; 96WO-US017480.  
 XX XX  
 PR 26-OCT-1995; 95US-0005974P.  
 PR 11-JAN-1996; 96US-00584040.  
 XX XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 PA (CHIR ) CHIRON CORP.  
 XX XX  
 PI Pavco P, Meswigen J, Stinchcomb D, Escobedo J;  
 XX XX  
 DR WPI; 1997-259017/23.  
 XX XX  
 PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA  
 PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,  
 PT rheumatoid arthritis, etc., in a human patient.  
 XX XX  
 PS Example 9; Page 192; 218pp; English.  
 XX XX  
 CC The present invention describes nucleic acid molecules which modulate the

synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAX67275 to AAX75752 represent specific examples of nucleic acid molecules from the present invention

Sequence 15 BP; 2 A; 5 C; 1 G; 0 T; 7 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;  
Best Local Similarity 41.7%; Pred. No. 9.8e+02;  
Matches 5; Conservative 6; Mismatches 1; Indels 0; Gaps 0;

922 TGCCTTTATCC 933

3 UUUUUUUUAUCC 14

RESULT 568

AAT76412 standard; DNA; 15 BP.

AAT76412;

15-SEP-1997 (first entry)

Human endothelin-1 antisense oligonucleotide.

Asthma; airway epithelium; adenosine free; cystic fibrosis; chronic obstructive pulmonary disease; bronchitis; ss.

Synthetic.

WO9640162-A1.

19-DEC-1996.

06-JUN-1996; 96WO-US009306.

07-JUN-1995; 95US-00474497.

(UYEC-) UNIV EAST CAROLINA.

Nyce JW, Metzger WJ;

WPI; 1997-051871/05.

Treatment of airway diseases such as asthma - by topically applying adenosine-free antisense oligonucleotide to airway epithelium of subject.

Claim 5; Page 38; 71pp; English.

A method for treating airway disease in a subject has been produced, which involves the topical administration of an essentially adenosine free antisense oligonucleotide (ON) to the airway epithelium of the subject. The present sequence is an antisense oligonucleotide specific for the human endothelin-1. The method can be used to treat airway diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary disease, bronchitis and other airway diseases characterised by an inflammatory response. By eliminating adenosine from the antisense ON, its liberation upon antisense degradation is prevented, thereby preventing adenosine-induced bronchoconstriction in patients with hyper-reactive airways

Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;  
Best Local Similarity 91.7%; Pred. No. 9.8e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 917 GTCCTTGCTTT 928

1 GTCCTTGCTTT 12

RESULT 569

AAX54195 standard; DNA; 15 BP.

AAX54195;

05-JUL-1999 (first entry)

Human endothelin-1 antisense oligonucleotide fragment.

Antisense oligonucleotide; multiple target; antisense treatment;

impaired respiration; inflammation; lung disease;

pulmonary vasoconstriction; inflammation; allergic rhinitis;

acute asthma; allergy; asthma; impeded respiration;

respiratory distress syndrome; pain; cystic fibrosis;

pulmonary hypertension; pulmonary vasoconstriction; emphysema;

chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;

colon cancer; breast cancer; lung cancer; pancreatic cancer;

hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;

prostate cancer; ss.

Synthetic.

WO9913886-A1.

25-MAR-1999.

17-SEP-1998; 98WO-US019419.

17-SEP-1997; 97US-0059160P.

09-JUN-1998; 98US-00093972.

(UYEC-) UNIV EAST CAROLINA.

Nyce JW;

WPI; 1999-229400/19.

New antisense oligonucleotides used in treatment of, e.g. pulmonary vasoconstriction.

Disclosure; Page 57; 120pp; English.

The specification describes antisense oligonucleotides (AAX52869-X55271) directed against at least 2 mRNAs selected from target genes, coding and non-coding regions of RNAs corresponding to target genes, gene initiation codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-end and the junction between coding and non-coding regions and all segments of RNAs encoding proteins associated with one or more diseases, conditions or mixtures. The antisense oligonucleotides may be derived from sequences AAX5272-74. These multiple target oligonucleotides (specifically AAX5180-271) can be used for the antisense treatment of diseases and conditions. Typical diseases and conditions are those associated with impaired respiration and inflammation, including lung diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis, acute asthma, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g. colon cancer, breast cancer, lung cancer, pancreatic cancer, hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as well as all types of cancers which may metastasize or have metastasized to the lungs, including breast and prostate cancer

Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;

Best Local Similarity 91.7%; Pred. No. 9.8e+02; Mismatches 0; Indels 1; Gaps 0;

QY 917 GTCCTTGCCTTT 928  
| | | | | | | |  
Db 1 GTCCTTGCCTTT 12

RESULT 570  
AA54205  
ID AA54205 standard; DNA; 15 BP.  
AC AA54205;  
XX  
JT 05-JUL-1999 (first entry)  
XX  
DE Human endothelin-1 antisense oligonucleotide fragment.  
XX  
KW Antisense oligonucleotide; multiple target; antisense treatment;  
KW impaired respiration; inflammation; lung disease;  
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;  
KW acute asthma; allergy; asthma; impeded respiration;  
KW respiratory distress syndrome; pain; cystic fibrosis;  
KW chronic obstructive pulmonary disease; emphysema;  
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;  
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;  
KW prostate cancer; ss.  
OS Synthetic.  
XX  
PN WO9913886-A1.  
XX  
PD 25-MAR-1999.  
XX  
PF 17-SEP-1998; 98WO-US019419.  
XX  
PR 17-SEP-1997; 97US-0059160P.  
PR 09-JUN-1998; 98US-00093972.  
XX  
PA (UYEC-) UNIV EAST CAROLINA.  
XX  
PI Nyce JW;  
XX  
DR WPI; 1999-229400/19.  
XX  
PT New antisense oligonucleotides used in treatment of, e.g. pulmonary  
PT vasoconstriction.  
XX  
PS Disclosure; Page 58; 120pp; English.  
XX  
CC The specification describes antisense oligonucleotides (AA52869-X55271)  
CC directed against at least 2 mRNAs selected from target genes, coding and  
CC non-coding regions of RNAs corresponding to target genes, gene initiation  
CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-  
CC end and the juxta-section between coding and non-coding regions and all  
CC segments of RNAs encoding proteins associated with one or more diseases,  
CC conditions or mixtures. The antisense oligonucleotides may be derived  
CC from sequences AA55180-271. These multiple target oligonucleotides  
CC (specifically AA55180-271) can be used for the antisense treatment of  
CC diseases and conditions. Typical diseases and conditions are those  
CC associated with impaired respiration and inflammation, including lung  
CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,  
CC acute asthma, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,  
CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary  
CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.  
CC colon cancer, breast cancer, lung cancer, pancreatic cancer,  
CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as  
CC well as all types of cancers which may metastasize or have metastasized  
CC to the lungs, including breast and prostate cancer  
XX  
SQ Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;  
Best Local Similarity 91.7%; Pred. No. 9.8e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 917 GTCCTTGCCTTT 928  
| | | | | | | |  
Db 1 GTCCTTGCCTTT 12

RESULT 571  
AAA33639  
ID AAA33639 standard; DNA; 15 BP.  
XX  
AC AAA33639;  
XX  
DT 28-JUL-2000 (first entry)  
XX  
DE Low adenosine antisense oligonucleotide SEQ ID NO:1328.  
XX  
KW Human; adenosine receptor; low adenosine antisense oligonucleotide;  
KW phosphorothioate; impaired respiration; inflammation; allergy;  
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;  
KW antiasthmatic; antiaesthetic; cytostatic; analgesic; impaired airway;  
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;  
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;  
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;  
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200009525-A2.  
XX  
PD 24-FEB-2000.  
XX  
PF 03-AUG-1999; 99WO-US017712.  
XX  
PR 03-AUG-1998; 98US-0095212P.  
XX  
PA (UYEC-) UNIV EAST CAROLINA.  
XX  
PI Nyce JW;  
XX  
DR WPI; 2000-205971/18.  
XX  
PT New antisense oligonucleotides useful for treating e.g. pulmonary  
PT vasoconstriction, inflammation, allergies, asthma, hypertension,  
PT bronchitis, emphysema, respiratory distress syndrome, ischemia or  
PT cancers.  
XX  
PS Claim 18; Page 430; 1343pp; English.  
XX  
CC The present invention describes a new composition comprising an antisense  
CC oligonucleotide (ON) with low adenosine (up to 15%), which targets  
CC nucleic acids involved in bronchoconstriction, allergies, and/or  
CC inflammation. The ON can have antiinflammatory, antiallergic,  
CC antiasthmatic, cytostatic and analgesic activities. The compositions are  
CC useful for the treatment of diseases associated with inflammation,  
CC impaired airways, including lung disease and diseases whose secondary  
CC effects afflict the lungs of a subject. They can be used for treating  
CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,  
CC impeded respiration, respiratory distress syndrome, pain, cystic  
CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive  
CC pulmonary disease (COPD), and cancers such as leukemias, lymphomas,  
CC carcinomas, and cancers which may metastasize to the lungs, including  
CC breast and prostate cancer. The reduction of the adenosine content of the  
CC ONs reduces side effects. The A-containing ONs break down with the  
CC release of deoxyadenosine which activates adenosine receptors causing  
CC bronchoconstriction and inflammation. AAA33313 to AAA35312 represent the  
CC nucleotide sequences given in the sequence listing from the present  
CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185  
CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ  
CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to

AAA33992) are specifically claimed ONs from the present invention. N.B. Sequences given in the disclosure of the present invention do not match up with their corresponding SEQ ID NO: sequences given in the sequence listing

Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;  
Best Local Similarity 91.7%; Pred. No. 9.8e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

917 GTCCTTGCGCTTT 928  
|||||  
1 GTCCTTGCGCTTT 12

RESULT 572  
AAA33649  
AAA33649 standard; DNA; 15 BP.

AAA33649;  
28-JUL-2000 (first entry)

Low adenosine antisense oligonucleotide SEQ ID NO:1338.

Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD; cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

Homo sapiens.  
WO200009525-A2.  
24-FEB-2000.  
03-AUG-1999; 99WO-US017712.  
03-AUG-1998; 98US-0095212P.  
(UYEC-) UNIV EAST CAROLINA.  
Nyce JW;  
WPI; 2000-205971/18.

New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstriction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or cancers.

Claim 18; Page 432; 1343pp; English.

The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergic, antiasthmatic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma, impaired respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of ONs reduces side effects. The A-containing ONs break down with the

release of deoxyadenosine which activates adenosine receptors causing bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the nucleotide sequences given in the sequence listing from the present invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185 sequences are also called SEQ ID NO:1 to 185, but the sequences differ from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to AAA33992) are specifically claimed ONs from the present invention. N.B. Sequences given in the disclosure of the present invention do not match up with their corresponding SEQ ID NO: sequences given in the sequence listing

Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;  
Best Local Similarity 91.7%; Pred. No. 9.8e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

917 GTCCTTGCGCTTT 928  
|||||  
1 GTCCTTGCGCTTT 12

RESULT 573  
AAZ64176  
AAZ64176 standard; RNA; 15 BP.

AAZ64176;  
28-MAR-2000 (first entry)

Substrate for hammerhead ribozyme which cleaves HCV RNA at nt. 5762.

Enzymatic nucleic acid; hammerhead ribozyme; virus replication; cleavage; cirrhosis; liver failure; hepatocellular carcinoma; interferon; cancer; autoimmune disease; ss.

Hepatitis C virus.  
WO9955847-A2.  
04-NOV-1999.  
26-APR-1999; 99WO-US009027.  
27-APR-1998; 98US-0083217P.  
18-SEP-1998; 98US-0100842P.  
25-FEB-1999; 99US-00257608.  
23-MAR-1999; 99US-00274553.  
(RIBO-) RIBOZYME PHARM INC.

Blatt L, McSwiggen JA, Roberts E, Pavco PA, Macejak D;  
WPI; 2000-062023/05.

Novel ribozymes for the treatment of diseases and conditions related to hepatitis C infection.

Claim 1; Page 83; 123pp; English.

The present sequence represents the preferred target sequence of an enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves the Hepatitis C virus (HCV) RNA sequence at the base position given in the descriptor line. The HCV sequence was screened for optimal ribozyme target sites using a computer folding algorithm and regions of the mRNA which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesised to target these sites and their activities optimised by either varying the length of the binding arms or by modification to prevent degradation by nucleases. The ribozymes of the invention inhibit gene expression and/or viral replication, and are used to treat diseases associated with Hepatitis C virus (HCV) infection, e.g. cirrhosis, liver failure and hepatocellular carcinoma. The ribozymes may be used in combination with

CC interferon to treat HCV infection, other infectious diseases, autoimmune  
 CC diseases, and cancer

XX  
 SQ Sequence 15 BP; 3 A; 6 C; 1 G; 0 T; 5 U; 0 Other;  
 Query Match 14.2%; Score 10.4; DB 1; Length 15;  
 Best Local Similarity 58.3%; Pred. No. 9.8e+02;  
 Matches 7; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY 932 CCTCTCTCTCA 943  
 |||:|:|:|:  
 Db 4 CCCUCGUUCA 15

RESULT 574

AAFI9761  
 ID AAFI9761 standard; DNA; 15 BP.

XX  
 AC AAFI9761;

XX  
 DT 14-MAR-2001 (first entry)

XX  
 DE Human endothelin-1 polynucleotide fragment #1328.

XX  
 KW Low adenine antisense oligonucleotide; phosphorothioate; allergy;  
 human; airway disorder; bronchoconstriction; lung inflammation;  
 surfactant depletion; respiratory bronchodilator; antiinflammatory;  
 immunosuppressive; antiasthmatic; analgesic; hypotensive; cytosstatic;  
 respiratory obstruction; pulmonary vasoconstriction; impeded respiration;  
 surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;  
 respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;  
 pulmonary hypertension; emphysema; pulmonary transplantation rejection;  
 chronic obstructive pulmonary disease; pulmonary infection; bronchitis;  
 cancer; ss.

XX  
 OS Homo sapiens.

XX  
 FN WO200062736-A2.

XX  
 FD 26-OCT-2000.

XX  
 FF 24-MAR-2000; 2000WO-US008020.

XX  
 FR 06-APR-1999; 99US-0127958P.

XX  
 FA (UYEC-) UNIV EAST CAROLINA.

XX  
 PA (NYCE/) NYCE J W.

XX  
 PI Nyce JW;

XX  
 DR WPI; 2000-679539/66.

XX  
 DR Low adenine (A) content antisense oligonucleotides which do not trigger  
 adenine receptors during metabolism, useful e.g. for treating cancers  
 and respiratory obstructions.

XX  
 PS Claim 14; Page 241; 1592pp; English.

XX  
 CC The present invention describes low adenine (A) content antisense  
 oligonucleotides and compositions (I) comprising them. In the antisense  
 oligonucleotides the A is replaced by a 'Universal' or alternative base.  
 (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,  
 immunosuppressive, antiasthmatic, hypotensive and cytosstatic activities.  
 The antisense oligonucleotides and (I) can be used to down-regulate the  
 expression and or activity of target polypeptides associated with  
 lung/respiratory disorders and malignancies, such as stimulating and  
 activating peptide factors and transmitters, transcription factors,  
 immunoglobulins and antibodies, antibody receptors, cytokines and  
 chemokines, endogenously produced specific and non-specific enzymes,  
 binding proteins, adhesion molecules and their receptors, cytokine and  
 chemokine receptors, adenine receptors, bradykinin receptors, central  
 nervous system (CNS) and peripheral nervous and non-nervous system  
 receptors, CNS and peripheral nervous and non-nervous system peptide

CC transmitters, defensins, growth factors, vasoactive peptides and  
 CC receptors, binding proteins and malignancy associated proteins. The  
 CC antisense oligonucleotides may be used in this way to treat disorders  
 including respiratory obstruction (especially pulmonary obstruction  
 and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or  
 CC surfactant hypoproduction which are associated with a disease or  
 CC condition selected from pulmonary vasoconstriction, inflammation,  
 CC allergies, asthma, impeded respiration, respiratory distress syndrome  
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary  
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),  
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,  
 CC and/or cancer. AAFI9434 to AAFI9453 represent human polynucleotide  
 CC fragments and antisense oligonucleotides used in the exemplification of  
 CC the present invention

XX  
 SQ Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;

Best Local Similarity 91.7%; Pred. No. 9.8e+02;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 917 GTCTTTCCTTT 928

||||| |||||

Db 1 GTCTTTCCTTT 12

RESULT 575

AAFI9771

ID AAFI9771 standard; DNA; 15 BP.

XX  
 AC AAFI9771;

XX  
 DT 14-MAR-2001 (first entry)

XX  
 DE Human endothelin-1 polynucleotide fragment #1338.

XX  
 KW Low adenine antisense oligonucleotide; phosphorothioate; allergy;  
 human; airway disorder; bronchoconstriction; lung inflammation;  
 surfactant depletion; respiratory bronchodilator; antiinflammatory;  
 immunosuppressive; antiasthmatic; analgesic; hypotensive; cytosstatic;  
 respiratory obstruction; pulmonary vasoconstriction; impeded respiration;  
 surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;  
 respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;  
 pulmonary hypertension; emphysema; pulmonary transplantation rejection;  
 chronic obstructive pulmonary disease; pulmonary infection; bronchitis;  
 cancer; ss.

XX  
 OS Homo sapiens.

XX  
 FN WO200062736-A2.

XX  
 FD 26-OCT-2000.

XX  
 PF 24-MAR-2000; 2000WO-US008020.

XX  
 PR 06-APR-1999; 99US-0127958P.

XX  
 PA (UYEC-) UNIV EAST CAROLINA.

XX  
 PA (NYCE/) NYCE J W.

XX  
 PI Nyce JW;

XX  
 DR WPI; 2000-679539/66.

XX  
 DR Low adenine (A) content antisense oligonucleotides which do not trigger  
 adenine receptors during metabolism, useful e.g. for treating cancers  
 and respiratory obstructions.

XX  
 PS Claim 14; Page 242; 1592pp; English.

XX  
 CC The present invention describes low adenine (A) content antisense  
 oligonucleotides and compositions (I) comprising them. In the antisense  
 oligonucleotides the A is replaced by a 'Universal' or alternative base.

(I) can have respiratory, bronchodilator, antiinflammatory, analgesic, immunosuppressive, antisthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (I) can be used to down-regulate the expression and/or activity of target polypeptides associated with lung/respiratory disorders and malignancies, such as stimulating and activating peptide factors and transmitters, transcription factors, immunoglobulins and antibodies, antibody receptors, cytokines and chemokines, endogenously produced specific and non-specific enzymes, binding proteins, adhesion molecules and their receptors, cytokine and chemokine receptors, adenosine receptors, bradykinin receptors, central nervous system (CNS) and peripheral nervous and non-nervous system receptors, CNS and peripheral nervous and non-nervous system peptide transmitters, defensins, growth factors, vasoactive peptides and receptors, binding proteins and malignancy associated proteins. The antisense oligonucleotides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or surfactant hypoproduction which are associated with a disease or condition selected from pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), pulmonary transplantation rejection, pulmonary infections, bronchitis, and/or cancer. AAF18434 to AAF21543 represent human polynucleotide fragments and antisense oligonucleotides used in the exemplification of the present invention

Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;  
Best Local Similarity 91.7%; Pred. No. 9.8e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

917 GTCCTTGCCCTTT 928  
|||||  
1 GTCCTTGCCCTTT 12

RESULT 576  
AAF48460/C  
AAF48460 standard; DNA; 15 BP.

AAF48460;

30-MAR-2001 (first entry)

IGFBP3 oligonucleotide #1880.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 7; Page 56; 20pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 6 A; 2 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;

Best Local Similarity 91.7%; Pred. No. 9.8e+02;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

919 CTTTGCCCTTTA 930

|||||

12 CTTTGCCCTTTA 1

RESULT 577

AAF49429

ID AAF49429 standard; DNA; 15 BP.

AAF49429;

30-MAR-2001 (first entry)

IGF-I oligonucleotide #389.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

XX Example 8; Page 63; 201pp; English.

CC The present invention relates to a method for ameliorating the effects of

CC skin disorders. The method comprises contacting the skin with an

CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1

CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of

CC inhibiting or reducing growth factor mediated cell proliferation,

CC inflammation and/or other disorders. The present sequence is an

CC oligonucleotide which can be used to design the antisense

CC oligonucleotides of the present invention (see AAF45151 and AAF45153-

CC F45161). The method is useful for ameliorating the effects of psoriasis,

CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,

CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a

CC hyperneovascular condition such as a neovascular condition of the retina,

CC brain or skin, growth factor-mediated malignancies, other sclerotic

CC disease, kidney disease, hyperproliferation of the inside of blood

CC vessels or any other hyperplasia

XX Sequence 15 BP; 2 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;

Best Local Similarity 91.7%; Pred. No. 9.8e+02;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 899 CCTGGTCATTT 910

Tb 4 CCTGGTCATCT 15

RESULT 578

AAF48457/c

ID AAF48457 standard; DNA; 15 BP.

XX AAF48457;

AC AAF48457;

XX 30-MAR-2001 (first entry)

DE IGFBP3 oligonucleotide #1877.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;

XX cytosatic; dermatological; cardiant; virucide; ophthalmological; keloid;

XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;

XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;

XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;

XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;

XX hyperneovascular condition; hyperplasia; kidney disease;

XX neovascular condition of the retina; ss.

OS Homo sapiens.

XX WO200078341-A1.

XX 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

XX Wraight CU, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering

XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that

XX inhibits or reduces growth factor mediated cell proliferation and/or

XX inflammation.

XX Example 7; Page 56; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of

CC skin disorders. The method comprises contacting the skin with an

CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1

CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of

CC inhibiting or reducing growth factor mediated cell proliferation,

CC inflammation and/or other disorders. The present sequence is an

CC oligonucleotide which can be used to design the antisense

CC oligonucleotides of the present invention (see AAF45151 and AAF45153-

CC F45161). The method is useful for ameliorating the effects of psoriasis,

CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,

CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a

CC hyperneovascular condition such as a neovascular condition of the retina,

CC brain or skin, growth factor-mediated malignancies, other sclerotic

CC disease, kidney disease, hyperproliferation of the inside of blood

CC vessels or any other hyperplasia

XX Sequence 15 BP; 6 A; 2 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;

Best Local Similarity 91.7%; Pred. No. 9.8e+02;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 919 CTTGCGCTTTTA 930

Tb 15 CTTGCGCTTTAA 4

RESULT 579

AAF48458/c

ID AAF48458 standard; DNA; 15 BP.

XX AAF48458;

AC AAF48458;

XX 30-MAR-2001 (first entry)

DE IGFBP3 oligonucleotide #1878.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;

XX cytosatic; dermatological; cardiant; virucide; ophthalmological; keloid;

XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;

XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;

XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;

XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;

XX hyperneovascular condition; hyperplasia; kidney disease;

XX neovascular condition of the retina; ss.

OS Homo sapiens.

XX WO200078341-A1.

XX 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

XX Wraight CU, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering

XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that

XX inhibits or reduces growth factor mediated cell proliferation and/or

XX inflammation.

XX Example 7; Page 56; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of

XX skin disorders. The method comprises contacting the skin with an

XX antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1

XX receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of

XX inhibiting or reducing growth factor mediated cell proliferation,

inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 6 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;  
Best Local Similarity 91.7%; Pred. No. 9.8e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

919 CTTGCTTTTA 930

|||||  
14 CTTGCTTTTA 3

RESULT 580

1F49434

AAF49434 standard; DNA; 15 BP.

AAF49434;

30-MAR-2001 (first entry)

IGF-I oligonucleotide #394.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
hyperneovascular condition; hyperplasia; kidney disease;  
neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 8; Page 63; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis,

CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
CC hyperneovascular condition such as a neovascular condition of the retina,  
CC brain or skin, growth factor-mediated malignancies, other sclerotic  
CC disease, kidney disease, hyperproliferation of the inside of blood  
CC vessels or any other hyperplasia  
XX

SQ Sequence 15 BP; 2 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;

Best Local Similarity 91.7%; Pred. No. 9.8e+02;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 901 CTGTCATTTTC 912

|||||

Db 1 CTGTCATTTTC 12

RESULT 581

AAF48459/c

ID AAF48459 standard; DNA; 15 BP.

XX AAF48459;

XX 30-MAR-2001 (first entry)

DE IGFBP3 oligonucleotide #1879.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
XX hyperneovascular condition; hyperplasia; kidney disease;  
XX neovascular condition of the retina; ss.

OS Homo sapiens.

XX WO200078341-A1.

XX 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

XX Wright CJ, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

XX Example 7; Page 56; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic



CC disease, kidney disease, hyperproliferation of the inside of blood  
CC vessels or any other hyperplasia  
SQ Sequence 15 BP; 6 A; 2 C; 3 G; 4 T; 0 U; 0 Other;  
Query Match 14.2%; Score 10.4; DB 1; Length 15;  
Best Local Similarity 91.7%; Pred. No. 9.8e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 919 CTTTGCCTTTTA 930  
Db 13 CTTTGCCTTTAA 2  
RESULT 582  
AAH45603  
ID AAH45603 standard; DNA; 15 BP.  
XX  
AC AAH45603;  
XX  
DT 19-SEP-2001 (first entry)  
XX  
DE Human cystic fibrosis gene exon 10 mutant target sequence SEQ ID 9.  
XX  
KW Assay; mismatch detection; binding affinity; cystic fibrosis; exon 10;  
KW human; mutant; ds.  
XX  
CS Homo sapiens.  
CS Synthetic.  
XX  
FN WO200146467-A2.  
XX  
PD 28-JUN-2001.  
XX  
PP 21-DEC-2000; 2000WO-IB001930.  
XX  
PR 21-DEC-1999; 99US-00468679.  
XX  
PA (INGE-) INGENEUS CORP.  
XX  
PI Daksis JI, Picard P, Erikson GH;  
XX  
XX WPI; 2001-418088/44.  
XX  
PT Nucleic acid hybridization assay by adding target, probe and  
PT intercalating agent to hybridization medium, irradiating test sample  
PT formed, detecting radiation intensity, determining mismatch between probe  
PT and target.  
XX  
PS Example 3; Page 18; 56pp; English.  
XX  
CC This invention relates to an assay which involves adding a target nucleic  
CC acid sequence, a probe complementary or imperfectly complementary to the  
CC target sequence, and an intercalating agent to a hybridization medium to  
CC form a test sample. The probe or intercalating agent contains a  
CC fluorophore, the test sample is irradiated, and the intensity of the  
CC fluorescent radiation emitted is detected. The extent of mismatch between  
CC the probe and the target sequence is determined. The assay method is  
CC useful for sequencing or assaying nucleic acids, preferably for assaying  
CC triplex and duplex nucleic acid hybridization complexes. The assay is  
CC also useful for identifying accessible regions in folded nucleotide  
CC sequences, to determine the number of mismatched pairs in a hybridization  
CC complex, and to map genomes. Other uses include the quantification of  
CC binding affinity between the probe and target sequence, which is useful  
CC for designing antisense drugs with optimized binding characteristics. The  
CC present sequence represents a mutated fragment of exon 10 of the human  
CC cystic fibrosis gene which is used as the target sequence in an example  
CC illustrating the assay of the invention  
XX  
SQ Sequence 15 BP; 2 A; 2 C; 3 G; 8 T; 0 U; 0 Other;  
Query Match 14.2%; Score 10.4; DB 1; Length 15;  
Best Local Similarity 91.7%; Pred. No. 9.8e+02;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 907 APTTCTTTGGT 918  
Db 3 ATCTTCTTTGGT 14  
RESULT 583  
AAS98357/c  
ID AAS98357 standard; DNA; 15 BP.  
XX  
AC AAS98357;  
XX  
DT 12-MAR-2002 (first entry)  
XX  
DE Galanin receptor gene GALR1 allele-specific oligonucleotide #69.  
XX  
KW Galanin receptor; GALR1; human; single nucleotide polymorphism; SNP;  
KW drug discovery; haplotyping; infectious diarrhoea;  
KW growth hormone deficiency; allele-specific oligonucleotide; ss.  
XX  
OS Homo sapiens.  
XX  
FN WO200179237-A2.  
XX  
PD 25-OCT-2001.  
XX  
PP 16-APR-2001; 2001WO-US012306.  
XX  
PR 14-APR-2000; 2000US-0197838P.  
XX  
PA (GENA-) GENAISSANCE PHARM INC.  
XX  
PI Bentivegna SC, Chew A, Choi JY, Denton RR, Nandabalan K;  
XX  
XX WPI; 2002-066341/09.  
XX  
PT Genotyping human galanin receptor gene of an individual for determining  
PT haplotype of an individual, involves determining the identity of  
PT nucleotide pair at specific polymorphic sites for two copies of the gene.  
XX  
PS Claim 16; Page 15; 99pp; English.  
XX  
CC The invention relates to genotyping human galanin receptor (GALR1) gene  
CC of an individual, involving determining for the two copies of the GALR1  
CC gene present in the individual, the identity of the nucleotide pair at  
CC one or more polymorphic sites. The method is useful for determining  
CC whether an individual has a haplotype or haplotype pairs defined in the  
CC specification. This is useful for improving the efficacy and reliability  
CC of several steps in the discovery and development of drugs for treating  
CC diseases associated with GALR1 activity, e.g., infectious diarrhoea and  
CC growth hormone deficiency, to validate GALR1 as a candidate agent for  
CC treating a specific condition or disease predicted to be associated with  
CC GALR1 activity, and in the design of clinical trials of candidate drugs  
CC for treating a specific condition or disease predicted to be associated  
CC with GALR1 activity. The method is useful to screen for compounds  
CC targeting GALR1 to treat a specific conditions or disease associated with  
CC GALR1 activity. A GALR1 polynucleotide or variant is useful in studying  
CC the expression and function of GALR1, and in expressing GALR1 protein for  
CC use in screening for candidate drugs to treat diseases related to GALR1  
CC activity. The polynucleotide or variant is useful for studying expression  
CC of the GALR1 isogenes in vivo, for in vivo screening and testing of drugs  
CC targeted against GALR1 protein, and for studying the effect of the  
CC variation on the biological activity of GALR1 as well as on the binding  
CC affinity of candidate drugs targeting GALR1 for the treatment of  
CC infectious diarrhoea and growth hormone insufficiency. AAS98289- AAS98408  
CC represent human GALR1 gene allele-specific oligonucleotides used to  
CC detect GALR1 gene polymorphisms as described in the method of the  
CC invention  
XX  
SQ Sequence 15 BP; 8 A; 1 C; 2 G; 3 T; 0 U; 1 Other;  
Query Match 14.2%; Score 10.4; DB 1; Length 15;

Best Local Similarity 78.6%; Pred. No. 9.8e+02;  
Matches 11; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

907 ATTTCCTTGGTCT 920  
|:|||||:  
15 AYTTCCTTAGTAT 2

RESULT 584

LS38353

AAL38353 standard; DNA; 15 BP.

AAL38353;

15-AUG-2002 (first entry)

ASO primer for detecting SCYA7 gene polymorphism SEQ ID 15.

Small inducible cytokine A7; SCYA7; polymorphic variant; haplotyping;  
inflammatory disorder; cancer; haplotype; single nucleotide polymorphism;  
genotype; human; ASO; PCR; primer; ss.

Homo sapiens.

WO200226771-A2.

04-APR-2002.

01-OCT-2001; 2001WO-US030880.

29-SEP-2000; 2000US-0236989P.

(GENA-) GENAISSANCE PHARM INC.

Chew A, Choi JY, Koshy B;

WPI; 2002-426009/45.

Novel small inducible cytokine A7 gene useful for therapeutic purposes,  
for studying the expression and function of the polynucleotide, and for  
expressing the cytokine protein.

Claim 14; Page 12; 54pp; English.

The invention relates to an isolated small inducible cytokine A7 (SCYA7)  
polynucleotide comprising a nucleotide sequence which is a polymorphic  
variant of a reference sequence for the SCYA7 cDNA or its fragment. The  
polymorphic variant SCYA7 gene is useful in screening for drugs  
targeting, which comprises contacting the SCYA7 gene with a candidate  
agent and assaying for binding activity. The SCYA7 gene and a recombinant  
nonhuman organism are useful in studying the expression and function of  
SCYA7, and in expressing SCYA7 protein for use in screening for candidate  
drugs to treat diseases related to SCYA7 activity such as inflammatory  
disorders, and cancer. Haplotyping the SCYA7 gene of an individual and  
identifying the association between a trait and at least one haplotype/  
haplotype pair are useful in developing diagnostic tests and therapeutic  
treatments for diseases associated with SCYA7 activity. Haplotyping the  
SCYA7 gene of an individual is also useful in the design of clinical  
trials of candidate drugs for treating specific conditions or diseases  
associated with SCYA7 activity. Genotyping the SCYA7 gene of an  
individual is useful in determining whether an individual has one of the  
haplotypes or one of the haplotype pairs. An isolated oligonucleotide  
probe of SCYA7 and the kit for haplotyping/genotyping the SCYA7 gene are  
useful in genotyping and/or haplotyping the SCYA7 gene in an individual.  
This polynucleotide sequence represents an ASO primer used for detecting  
polymorphisms in the SCYA7 gene of the invention

Sequence 15 BP; 1 A; 2 C; 3 G; 8 T; 0 U; 1 Other;

Query Match

14.2%; Score 10.4; DB 1; Length 15;

Best Local Similarity 78.6%; Pred. No. 9.8e+02;

Matches 11; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 935 TCCTCTTCATTGGT 948  
||| ||| |||:  
Db 2 TCTCTTCATTGGT 15

RESULT 585

AAS98789/c

ID AAS98789 standard; DNA; 15 BP.

XX AAS98789;

XX 26-MAR-2002 (first entry)

XX Colony stimulating factor 1 receptor (CSF1R) oligonucleotide #155.

XX Colony stimulating factor 1 receptor; CSF1R; polymorphic variant;

XX cytostatic; gene therapy; malignant histiocytosis; isogene;

XX myeloid malignancy; inflammatory disorder; transgenic animal; haplotype;

XX genotype; human; allele specific oligonucleotide; ASO; primer; ss.

XX Homo sapiens.

XX WO200179225-A2.

XX 25-OCT-2001.

XX 12-APR-2001; 2001WO-US012044.

XX 12-APR-2000; 2000US-0196411P.

XX (GENA-) GENAISSANCE PHARM INC.

XX Chew A, Choi JY, Koshy B;

XX WPI; 2002-075058/10.

Novel polymorphic variants of colony stimulating factor 1 receptor useful  
in studying expression and function of the protein, useful for screening  
candidate drugs to treat diseases e.g. inflammatory disorders.

Claim 15; Page 17; 164pp; English.

The invention describes a novel isolated polynucleotide (1) comprising a  
sequence which is a polymorphic variant (PV) of a reference sequence for  
colony stimulating factor 1 receptor (CSF1R) gene, found on the  
polypeptide are useful for improving the discovery and development of  
drugs for treating diseases associated with CSF1R activity, e.g.,  
malignant histiocytosis, myeloid malignancies, and inflammatory disorders  
and the haplotypes can be used to validate CSF1R as a candidate target  
for treating a specific condition or disease predicted to be associated  
with CSF1R activity. Genotyping the CSF1R gene of an individual can also  
be used in developing diagnostic tests and therapeutic treatments. (1) is  
useful in studying the expression and function of CSF1R, and in  
expressing CSF1R protein for use in screening for candidate drugs to  
treat diseases related to CSF1R activity and in studying the effect of  
the variation on the biological activity of CSF1R as well as on the  
binding affinity of candidate drugs targeting CSF1R. Antibodies are  
useful in a variety of diagnostic and prognostic formats and therapeutic  
methods. A transgenic animal is useful in studying expression of the  
CSF1R isogenes in vivo, for in vivo screening and testing of drugs  
targeted against CSF1R protein, and for testing the efficacy of  
therapeutic agents and compounds. Allele specific oligonucleotides (ASO)  
are useful as probes and primers, and for assaying a polymorphism in the  
target region. Without requiring any a priori knowledge of the phenotypic  
effect of any particular CSF1R or haplotype the invention provides a  
method for identifying lead compounds that are more likely to show  
efficacy in clinical trials. This sequence is an allele specific  
oligonucleotide primer used for detecting CSF1R gene polymorphisms,  
described in the method of the invention

Sequence 15 BP; 7 A; 3 C; 4 G; 0 T; 0 U; 1 Other;

Query Match

14.2%; Score 10.4; DB 1; Length 15;

```
Best Local Similarity 78.6%; Pred. No. 9.8e+02;
Matches 11; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
```

Qy 901 CTGGTCATTTTCTT 914  
|:| | | | | | |  
yb 15 CYGGCCCTTTTCTT 2

RESULT 586  
AAS98652/c  
ID AAS98652 standard; DNA; 15 BP.

AC AAS98652;  
XX  
DT 26-MAR-2002 (first entry)

DE Colony stimulating factor 1 receptor (CSF1R) oligonucleotide #18. ....

Colony stimulating factor 1 receptor; CSF1R; polymorphic variant;  
cytostatic; gene therapy; malignant histiocytosis; isogene;  
myeloid malignancy; inflammatory disorder; transgenic animal; haplotype;  
genotype; human; allele specific oligonucleotide; ASO; probe; ss.

CS Homo sapiens.  
XX  
PN WO200179225-A  
XX  
PD 25-OCT-2001.

12-APR-2001; 2001WO-US012044.

PR 12-APR-2000; 2000US-0196411P.

PA (GENA-) GENAISSANCE PHARM INC.

Chew A, Choi JY, Koshy B;

DR WPI; 2002-075058/10.

Novel polymorphic variants of colony stimulating factor 1 receptor useful in studying expression and function of the protein, useful for screening candidate drugs to treat diseases e.g. inflammatory disorders.

PS Claim 15; Page 15; 164pp; English.

The invention describes a novel isolated polynucleotide (I) comprising a sequence which is a polymorphic variant (PV) of a reference sequence for colony stimulating factor 1 receptor (CSF1R) gene, found on the polypeptide are useful for improving the discovery and development of drugs for treating diseases associated with CSF1R activity, e.g., malignant histiocytosis, myeloid malignancies, and inflammatory disorders and the haplotypes can be used to validate CSF1R as a candidate target for treating a specific condition or disease predicted to be associated with CSF1R activity. Genotyping the CSF1R gene of an individual can also be used in developing diagnostic tests and therapeutic treatments. (I) is useful in studying the expression and function of CSF1R, and in expressing CSF1R protein for use in screening for candidate drugs to treat diseases related to CSF1R activity and in studying the effect of the variation on the biological activity of CSF1R as well as on the binding affinity of candidate drugs targeting CSF1R. Antibodies are useful in a variety of diagnostic and prognostic formats and therapeutic methods. A transgenic animal is useful in studying expression of the CSF1R isogenes *in vivo*, for *in vivo* screening and testing of drugs targeted against CSF1R protein, and for testing the efficacy of therapeutic agents and compounds. Allele specific oligonucleotides (ASO) are useful as probes and primers, and for assaying a polymorphism in the target region. Without requiring any *a priori* knowledge of the phenotypic effect of any particular CSF1R or haplotype the invention provides a method for identifying lead compounds that are more likely to show efficacy in clinical trials. This sequence is an allele specific oligonucleotide probe used for detecting CSF1R gene polymorphisms, described in the method of the invention

SQ Sequence 15 BP; 5 A; 1 C; 7 G; 1 T; 0 U; 1 Other;  
Query Match 14.2%; Score 10.4; DB 1; Length 15;  
Best Local Similarity 78.6%; Pred. No. 9.8e+02;  
Matches 11; Conservative 1; Mismatches 2; Indels

QY 929 TATCCCTCCTCTTC 942  
| | | | |  
Db 14 TGTCCTCTCTCTTC 1

RESULT 587  
AAD45257/c  
ID AAD45257 standard; DNA; 15 BP.

AAC AAD45257;

DT 27-DEC-2002 (first entry)

DE Human PON-1 gene polymorphism detecting ASO primer #13.

Human; paraoxonase 1; PON1; single nucleotide polymorphism; transgenic;  
 KW SNP; drug screening; organo-phosphorous metabolism; target validation;  
 KW atherosclerosis; type II diabetes; gene therapy; antilipaeamic; primer;  
 KW allele specific oligonucleotide; ASO; ss.

Homo sapiens.

XX  
PN  
WO200266680-A1.

29-AUG-2002.

AA  
PF  
06-DEC-2001: 2001WO-US046896

PR 16-FEB-2001; 2001WO-US000511

PA (GENA-) GENAISSANCE PHARM INC.

AA Anastasio AE, Chew A, Choi JY, Denton RR, Nandabalan K, Parks KE;  
PI Stephens JC;

DR WPI; 2002-682769/73.

PT New genetic variants of human paraoxonase 1 (PON1) gene with  
PT polymorphisms, useful for treating disorders associated with PON1 isoenzyme  
PT activity e.g. atherosclerosis or diabetes, or for screening drugs for  
PT treating these diseases.

PS Claim 15; Page 15; 118pp; English.

The invention relates to methods for haplotyping human paraoxonase 1 (PON1) gene. It also relates to the single nucleotide polymorphisms (SNP) in PON-1 gene. Polymorphic variants of the PON1 gene are useful in studying the expression and function of PON1, and in expressing PON1 proteins for use in screening candidate drugs to treat diseases associated with PON1 activity, e.g. disorders of lipid and organo-phosphorous metabolism such as atherosclerosis or type II diabetes. They are also used in gene therapy. Establishing PON1 haplotype or haplotype pair of an individual is useful for improving the efficiency and reliability of several steps including target validation, in the discovery and development of drugs for treating diseases associated with PON1 activity. Transgenic animals are useful for studying expression of the PON1 isogenes in vivo. The present sequence is an allele specific oligonucleotide (ASO) primer used to detect human PON-1 gene polymorphisms

Sequence 15 BP; 6 A; 4 C; 1 G; 3 T; 0 U; 1 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;  
Best Local Similarity 91.7%;  
Matches 11; Conservative 0; Mismatches 1; Indels  
Pred. No. 9.8e+02;

Qy 945 TGGTTTAAATGTA 956

||||| |||||  
13 TGGTCAATGTA 2

RESULT 588  
ABK96346 standard; DNA; 15 BP.  
ABK96346;  
24-SEP-2002 (first entry)  
Human SA homologue, SAH, allele specific primer #2.  
Human; ss; primer; rat hypertension-associated homologue; SAH;  
hypertension; chromosome 16p13.11; hypertensive; SNP; PCR;  
single nucleotide polymorphism; haplotype; genotype; isogene.  
Homo sapiens.  
WO200244201-A2.  
06-JUN-2002.  
03-DEC-2001; 2001WO-US047011.  
01-DEC-2000; 2000US-0250441P.  
(GENA-) GENAISSANCE PHARM INC.  
Bieglecki KM, Chew A, Russo DP;  
WPI; 2002-519582/55.  
Novel genetic variants of SA (Rat Hypertension-associated) Homolog  
isogenes, useful for improving efficiency and reliability in drug  
development for treating hypertension.  
Claim 15; Page 14; 98pp; English.  
The invention relates to an isolated polynucleotide (I) comprising a  
first nucleotide sequence (NS1) comprising SAH (SA, Rat Hypertension-  
associated Homologue isogene (II) selected from isogenes 1-15 and 17-20  
given in the specification, where each isogene comprises the regions of  
NS1 and is further defined by the corresponding sequence of single  
nucleotide polymorphisms or a second nucleotide sequence (NS2)  
complementary to NS1. Alternatively, (I) comprises a coding sequence for  
SAH isogenes or fragments. Also included are methods of predicting the  
haplotype/genotype of the SAH gene of an individual, identifying an  
association between a trait and at least one haplotype or haplotype pair  
of SAH genes, an isolated oligonucleotide for detecting a polymorphism in  
the SAH gene, a recombinant non-human organism transformed or transfected  
with the SAH polynucleotide, an isolated polypeptide comprising an amino  
acid sequence which is a polymorphic variant of the SAH protein, a  
monoclonal antibody specific for SAH, a computer system for storing and  
analysing polymorphism data for the SAH gene and a genome anthology for  
the SAH gene. The SAH proteins and haplotype/genotype methods are useful  
in screening for drugs targeting SAH that are useful for treating  
hypertension and for drug discovery, development and target validation.  
The antibody is useful in diagnostic, prognostic and therapeutic methods.  
The polynucleotides are useful in studying the expression and function of  
SAH, in expressing SAH protein for use in screening for candidate drugs  
and in studying the effect of the variation on the biological activity of  
SAH as well as on the binding affinity of candidate drugs targeting SAH.  
The gene for SAH is located on chromosome 16p13.11. The present sequence  
is an allele specific primer for detecting SAH nucleic acids bearing a  
polymorphism  
Sequence 15 BP; 0 A; 6 C; 1 G; 7 T; 0 U; 1 Other;  
Query Match 14.2%; Score 10.4; DB 1; Length 15;  
Best Local Similarity 78.6%; Pred. No. 9.8e+02;  
Matches 11; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 928 TTATCCCTCTCTT 941  
||| ||||| |||  
Db 2 TTCTCCCTCTCTT 15

RESULT 589  
ABQ88644/c  
ID ABQ88644 standard; DNA; 15 BP.  
XX  
AC ABQ88644;  
XX  
DT 23-SEP-2002 (first entry)  
XX  
DE Human CFL1 ASO probe #3.  
XX  
XX Human; cofillin 1; CFL1; gene therapy; antisense gene therapy;  
KW immunological disorder; ASO; allele-specific oligonucleotide; probe; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200194376-A1.  
XX  
PD 13-DEC-2001.  
XX  
PF 11-JUN-2001; 2001WO-US018815.  
XX  
PR 09-JUN-2000; 2000US-0210884P.  
XX  
PA (GENA-) GENAISSANCE PHARM INC.  
XX  
PI Anastasio AE, Duda A, Klien SE, Koshy B, Sausker EA;  
XX  
XX WPI; 2002-566437/60.  
XX  
XX Novel genetic variants of human cofillin 1, CFL1 gene for studying  
PT expression, function of the gene and expressing CFL1 protein useful in  
XX identifying drugs to treat immunological disorders.  
XX  
PS Claim 17; Page 13; 84pp; English.  
XX  
XX The invention relates to a novel polynucleotide sequence which is a  
CC polymorphic variant of a reference sequence for the cofillin 1 (non-  
CC muscle) (CFL1) gene or its fragment, or a polymorphic variant of a  
CC reference sequence for a CFL1 cDNA or its fragment. The polynucleotide of  
CC the invention may have a use in gene therapy, and in antisense gene  
CC therapy. The polynucleotide is useful for studying the expression and  
CC function of CFL1 and expressing CFL1 protein for use in screening for  
CC candidate drugs to treat diseases related to CFL1 activity. The  
CC polymorphism and haplotype data are useful for validating whether CFL1 is  
CC a suitable target for drugs to treat immunological disorders, screening  
CC for such drugs and reducing bias in clinical trials of such drugs. The  
CC present sequence represents one of a set of allele-specific  
CC oligonucleotide (ASO) probes used in the invention to detect  
CC polymorphisms in the CFL1 gene  
XX  
SQ Sequence 15 BP; 6 A; 2 C; 3 G; 3 T; 0 U; 1 Other;  
Query Match 14.2%; Score 10.4; DB 1; Length 15;  
Best Local Similarity 78.6%; Pred. No. 9.8e+02;  
Matches 11; Conservative 1; Mismatches 2; Indels 0; Gaps 0;  
QY 942 CATTGGTTTAATCT 955  
||| ||||| |||  
Db 15 CATTGGTYCAATTT 2  
RESULT 590  
ABT05325  
ID ABT05325 standard; DNA; 15 BP.  
XX  
AC ABT05325;  
XX



WPI; 2002-617759/66.

New ribozymes targeting RNA derived from hepatitis C virus inhibit viral replication and are useful to treat hepatitis C virus infections and cirrhosis, liver failure or hepatocellular carcinoma.

Claim 1; Page 50; 80pp; English.

The present invention relates to enzymatic nucleic acids which specifically cleave RNA derived from Hepatitis C virus (HCV). The enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin (HP) motif where the binding arms comprise sequences complementary to one of the substrate sequences defined in the specification. The HCV ribozymes are useful for modulating the expression and/or replication of HCV. They can be used to treat cirrhosis, liver failure and/or hepatocellular carcinoma. The HCV ribozymes are also useful for treating a condition associated with HCV infection in conjunction with one or more other drug therapies, particularly type I interferon, especially interferon alpha, beta or gamma or consensus interferon. The present sequence represents a substrate for a HCV hammerhead (HH) ribozyme. Note: Some of the sequence data for this patent did not form part of the printed specification. The complete sequence data for this patent was obtained in electronic format directly from the USPTO web site at [seqdata.uspto.gov/psipdIDentry.html](http://seqdata.uspto.gov/psipdIDentry.html)

Sequence 15 BP; 3 A; 6 C; 1 G; 0 T; 5 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;

Best Local Similarity 58.3%; Pred. No. 9.8e+02;

Matches 7; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

932 CCTCCTCTTCA 943

||||:||||:  
4 CCCUCCUGUUA 15

35ULT 593

ABL36360/C

ABL36360 standard; DNA; 15 BP.

ABL36360;

22-APR-2002 (first entry)

Human lysosomal acid phosphatase 2 (ACP2) allele-specific PCR primer 40.

Human; ss; lysosomal acid phosphatase 2; ACP2; gene; chromosome 11;

lysosome-specific enzyme; orthophosphoric monoester hydrolysis;

Hodgkin's disease; HD; acid phosphatase deficiency;

novel polymorphic site; ACP2 haplotype; ACP2 genotype; polymorphism;

transgenic animal; primer; probe; primer-extension oligonucleotide; SNP;

single nucleotide polymorphism.

Homo sapiens.

WO200194362-A2.

13-DEC-2001.

07-JUN-2001; 2001WO-US018457.

07-JUN-2000; 2000US-0210047P.

(GENA-) GENAISANCE PHARM INC.

Kliem SE, Messer C, Tanguay DA;

WPI; 2002-154563/20.

Novel genetic variants of acid phosphatase 2, lysosomal polypeptide gene useful in studying expression and function of the protein, and for screening drugs to treat diseases e.g. Hodgkin's disease.

Claim 17; Page 14; 109pp; English.

The invention comprises the human lysosomal acid phosphatase 2 (ACP2) nucleic acid and protein sequences. Specifically, the invention relates to the discovery of 22 novel polymorphic sites within the ACP2 gene. The invention also comprises methods for haplotyping and genotyping the ACP2 gene in an individual. The ACP2 gene (located on chromosome 11) encodes a lysosomal-specific enzyme that catalyses the hydrolysis of orthophosphoric monoesters to alcohol and phosphate. The ACP2 gene and protein are pharmaceutically important in the treatment of Hodgkin's disease (HD) and acid phosphatase deficiency. The novel ACP2 gene polymorphisms of the invention are useful in haplotyping the ACP2 gene. ACP2 haplotyping is useful in validating ACP2 as a target (and designing drugs) for treating an ACP2-related disease or condition (e.g. Hodgkin's disease and acid phosphatase deficiency). The ACP2 gene polymorphisms are useful for ACP2 genotyping, which can also be used to develop diagnostic tests and therapeutic treatments. The ACP2 protein and nucleic acids of the invention are useful in the production of a transgenic animal which expresses ACP2 protein. The ACP2 nucleic acids of the invention are useful in the production of allele-specific oligonucleotides designed to represent each of the ACP2 polymorphisms. Nucleic acids ABL36299-ABL36320 represent claimed ACP2 allele-specific probes. Nucleic acids ABL36321-ABL36364 represent claimed ACP2 allele-specific PCR primers. Nucleic acids ABL36365-ABL36408 represent claimed ACP2 primer-extension oligonucleotides

Sequence 15 BP; 5 A; 1 C; 6 G; 2 T; 0 U; 1 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;

Best Local Similarity 78.6%; Pred. No. 9.8e+02;

Matches 11; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

933 CCTCCTCTTCA 946

||||:||||:  
15 CTTCTCTCTCATAG 2

RESULT 594

ABZ95465

ID ABZ95465 standard; DNA; 15 BP.

ABZ95465;

17-OCT-2003 (first entry)

Human endothelin-1 antisense fragment no.1329.

Human; antisense; lung dysfunction; nasal airway dysfunction;

antiinflammatory steroid; ublquinone; antiinflammatory; antiallergic;

antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

antisense gene therapy; respiratory; lung; adenosine sensitivity;

adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

lung inflammation; respiratory disease; ds.

Homo sapiens.

WO200285308-A2.

31-OCT-2002.

23-APR-2002; 2002WO-US013135.

24-APR-2001; 2001US-0286137P.

(EPIG-) EPIGENESIS PHARM INC.

Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

Miller S, Tang L, Shahabuddin S;

WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its

PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
 PT ubiquinone.

PS Disclosure; SEQ ID NO 10707; 872pp; English.

XX  
 CC The invention relates to a novel pharmaceutical composition, which has a  
 CC first active agent comprising an oligonucleotide antisense to the  
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
 CC junctions of genes encoding a polypeptide associated with lung and/or  
 CC nasal airway dysfunction and a second active agent comprising an  
 CC antiinflammatory steroid and ubiquinone. A composition of the invention  
 CC has antiinflammatory, antiasthmatic, hypotensive,  
 CC immunosuppressive, and cytostatic activity. The composition may have a  
 CC use in antisense gene therapy. The composition is useful for treating or  
 CC preventing a respiratory, lung or malignant disease or condition, also  
 CC for enhancing the prophylactic or therapeutic respiratory effect of an  
 CC antiinflammatory steroid in a subject, for reducing or depleting levels  
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
 CC lung inflammation, lung allergies, or a respiratory disease or condition.  
 CC Note: The sequence data for this patent is not represented in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;  
 Best Local Similarity 91.7%; Pred. No. 9.8e+02;  
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

CY 917 GTCCTTGCCTTT 928  
 ||||| |||||  
 Db 1 GTCCTTGCCTTT 12

## RESULT 595

ABZ95455  
 ID ABZ95455 standard; DNA; 15 BP.

XX  
 AC ABZ95455;

XX 17-OCT-2003 (first entry)

XX Human endothelin-1 antisense fragment no.1319.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiasthmatic;  
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO20020285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired  
 PT respiration, has oligo(s) antisense to specific gene(s) or its

PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
 PT ubiquinone.

PS Disclosure; SEQ ID NO 10697; 872pp; English.

XX  
 CC The invention relates to a novel pharmaceutical composition, which has a  
 CC first active agent comprising an oligonucleotide antisense to the  
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
 CC junctions of genes encoding a polypeptide associated with lung and/or  
 CC nasal airway dysfunction and a second active agent comprising an  
 CC antiinflammatory steroid and ubiquinone. A composition of the invention  
 CC has antiinflammatory, antiasthmatic, hypotensive,  
 CC immunosuppressive, and cytostatic activity. The composition may have a  
 CC use in antisense gene therapy. The composition is useful for treating or  
 CC preventing a respiratory, lung or malignant disease or condition, also  
 CC for enhancing the prophylactic or therapeutic respiratory effect of an  
 CC antiinflammatory steroid in a subject, for reducing or depleting levels  
 CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or  
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
 CC lung inflammation, lung allergies, or a respiratory disease or condition.  
 CC Note: The sequence data for this patent is not represented in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;  
 Best Local Similarity 91.7%; Pred. No. 9.8e+02;  
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

CY 917 GTCCTTGCCTTT 928  
 ||||| |||||  
 Db 1 GTCCTTGCCTTT 12

## RESULT 596

AAD54792/C  
 ID AAD54792 standard; DNA; 15 BP.

XX  
 AC AAD54792;

XX 26-JUN-2003 (first entry)

XX Human cystic fibrosis gene specific probe No. 8.

XX Nucleic acid multiplex; Watson-Crick duplex; drug designing; human;  
 KW cystic fibrosis; probe; ss.

XX Homo sapiens.

XX WO2002103051-A2.

XX 27-DEC-2002.

XX 31-MAY-2002; 2002WO-IB001972.

XX 20-JUN-2001; 2001US-00885731.

XX (INGE-) INGENEUS CORP.

XX Erikson GH, Daksis JI, Kandic I, Picard P;

XX WPI; 2003-183992/18.

XX Forming nucleic acid multiplex, particularly triplexes and quadruplexes,  
 PT by using accelerator agents such as cations to create them.

XX Example 12; Page 76; 61pp; English.

XX The invention relates to a method for forming nucleic acid multiplex,  
 CC particularly triplexes and quadruplexes, by using accelerator agents such





XX 29-DEC-1998 (first entry)  
 XX Primer KC164 used in the method of the invention.  
 DE PCR; primer; amplification; single chain T-cell receptor; scTCR; Vbc;  
 XX bacteriophage coat protein; BCP; V-alpha chain; Vac; V-beta chain;  
 KW immune response; T-cell receptor; TCR; cancer; allergy; T lymphocyte; ss.  
 XX Synthetic.  
 XX WO9839482-A1.  
 XX 11-SEP-1998.  
 PD 05-MAR-1998; 98WO-US004274.  
 XX 07-MAR-1997; 97US-00813781.  
 XX (SUNO-) SUNOL MOLECULAR CORP.  
 XX Weidanz JA, Card KF, Wong HC;  
 XX WPI; 1998-506374/43.  
 XX New soluble T cell receptor fusion proteins - comprise V-alpha chain,  
 PT peptide linker, V-beta chain and bacteriophage coat protein, used to,  
 PT e-g. develop products for modulating immune responses.  
 XX Disclosure; Fig 21D; 150pp; English.  
 XX The present primer was used to construct DNA vectors which were used in  
 CC the method of the invention. The invention provides single chain T-cell  
 CC receptor (scTCR) fusion proteins which comprise of a bacteriophage coat  
 CC protein (BCP; e-g. gene III or VIII product) covalently linked to a scTCR  
 CC comprising of a V-alpha chain (Vac) covalently linked to a V-beta chain  
 CC (Vbc) by a peptide linker sequence. The BCP increases solubility of the  
 CC scTCR fusion proteins, thereby enhancing yield and functionality. The  
 CC scTCR fusion proteins are fully soluble and functional, and can be  
 CC isolated in significant quantities without performing difficult  
 CC solubilisation, cleaving or re-folding steps. The scTCR fusion proteins  
 CC can be produced in a variety of formats including bacteriophage display  
 CC libraries to screen for binding molecules which specifically bind the  
 CC scTCR fusion proteins. The scTCRs are claimed to be useful for reducing  
 CC an immune response by competing with an antigen with T-cell receptors  
 CC (TCR) occurring on pathogenic T cells such as those accompanying cancer,  
 CC infectious disease, allergy, etc. The scTCRs are also claimed to be  
 CC useful for inducing an immune response for immunisation against TCR  
 CC structures to reduce or eliminate the pathogenic or undesirable effects  
 CC of T cells, and they can also be used for the production of antibodies  
 CC and in diagnostic applications  
 XX SQ Sequence 16 BP; 8 A; 5 C; 3 G; 0 T; 0 U; 0 Other;  
 Query Match 14.2%; Score 10.4; DB 1; Length 16;  
 Best Local Similarity 91.7%; Pred. No. 1e+03;  
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 917 GTCTTTGCCTTT 928  
 DB 13 GTCTTTGCCTTT 2  
 RESULT 600  
 ID AAX28404/C  
 XX AAX28404 standard; DNA; 16 BP.  
 XX AAX28404;  
 XX 21-JUN-1999 (first entry)  
 XX Probe for CCR5 gene.  
 DE WPI; 1999-264000/22.

KW Probe; CCR5 gene; non-synctia-inducing; HIV-1; mutation detection;  
 KW chemokine receptor gene; infection; disease progression prediction; ss.  
 XX Synthetic.  
 XX WO9913112-A1.  
 XX 18-MAR-1999.  
 PD 14-SEP-1998; 98WO-US019007.  
 XX 12-SEP-1997; 97US-00928465.  
 XX (ALKU) AKZO NOBEL NV.  
 XX Romano JW, Lee EM;  
 XX WPI; 1999-263372/22.  
 XX Determination of zygosity of CCR5 chemokine receptor gene in an  
 PT individual.  
 PT Claim 10; Page 24; 36pp; English.  
 XX This sequence represents a probe for a region of the CCR5 gene. The  
 CC invention relates to a method for the determination of susceptibility of  
 CC an individual to non-synctia-inducing (NSI) forms of human  
 CC immunodeficiency virus type 1 (HIV-1), by detecting whether the  
 CC individual is homozygous mutant, heterozygous or homozygous wild type for  
 CC the CCR5 chemokine receptor gene. The method can be used to predict  
 CC susceptibility of an individual to infection by NSI forms of HIV-1 and  
 CC for predicting disease progression  
 XX SQ Sequence 16 BP; 7 A; 3 C; 1 G; 5 T; 0 U; 0 Other;  
 Query Match 14.2%; Score 10.4; DB 1; Length 16;  
 Best Local Similarity 91.7%; Pred. No. 1e+03;  
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 948 TTTAATGATCG 959  
 DB 13 TTTAATGATCG 2  
 RESULT 601  
 ID AAX55357/C  
 XX AAX55357 standard; DNA; 16 BP.  
 XX AAX55357;  
 XX 08-JUL-1999 (first entry)  
 XX Soluble sc-TCR fusion protein constructing primer KC164.  
 XX Fusion protein; soluble; immunoglobulin; Ig; sc-TCR; immune response;  
 KW single-chain T-cell receptor; T cell activation; therapy; PCR primer; ss.  
 XX Synthetic.  
 XX WO9918129-A1.  
 XX 15-APR-1999.  
 XX 28-SEP-1998; 98WO-US020263.  
 XX 02-OCT-1997; 97US-00943086.  
 XX (SUNO-) SUNOL MOLECULAR CORP.  
 XX Weidanz JA, Card KF, Wong HC;  
 XX WPI; 1999-264000/22.

Soluble single-chain T cell receptor proteins.

Example; Fig 6D; 145pp; English.

The invention relates to a soluble fusion protein that comprises an immunoglobulin (Ig) light chain constant region or fragment, covalently linked to a single-chain T-cell receptor (sc-TCR) comprising a V-alpha chain covalently linked to a V-beta chain by a peptide linker sequence. The soluble fusion protein can induce an immune response in a mammal, so that the mammal is immunized against pathogenic T cell receptor epitopes. It can also be used to inhibit T-cell activation in a mammal. The sc-TCR can be used to kill a cell containing a TCR specific ligand. The sc-TCR proteins can be used in vitro to detect and analyze ligands such as peptides and MHC/HLA molecular components of TCR ligands. They can also be used to detect T-cells with pathogenic properties. Other uses include functional, cellular and molecular assays and structural analysis. In vivo the sc-TCRs can compete with pathogenic T cells or to raise antibodies for use in therapy. Fusion of an Ig light chain constant region to a sc-TCR facilitates soluble expression. The sc-TCR can be isolated in significant quantities without performing difficult solubilisation, cleaving or re-folding steps. The fusion also confers a means of detecting and purifying the fusion proteins by conventional immunological methods. Sequences AAX55301 to AAX55445 represent PCR primers used for constructing the fusion proteins of the invention

Sequence 16 BP; 8 A; 5 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 16;

Best Local Similarity 91.7%; Pred. No. 1e+03;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

917 GCTTTGCGTTT 928

|||||

13 GCTTTGCGTTT 2

35ULT 602

AX14780/C

AAX14780 standard; DNA; 16 BP.

AAX14780;

24-MAR-1999 (first entry)

Triple helix forming nucleotides 2771-2786 of Hepatitis B virus.

Triple-helix forming region; Triplex formation; DNA detection;

identification; bacteria; oncogene; virus; ds.

Hepatitis B virus.

US5861244-A.

19-JAN-1999.

22-DEC-1993; 93US-00173489.

29-OCT-1992; 92US-00968436.

(PROF-) PROFILE DIAGNOSTIC SCI INC.

Hepburn AG, Wang C;

WPI; 1999-130384/11.

Assay of genetic sequences based on triplex formation from double stranded analyte - and hybrid of anchor and reporter sequences, with reporter released if triplex formation occurs, used e.g. to identify bacteria.

Disclosure; Col 19-20; 168pp; English.

The present sequence represents a potential triple-helix forming region.

CC It can be used to demonstrate the assay of the invention. The assay  
CC comprises adding a sample containing double-stranded DNA test sequences,  
CC e.g. containing the present sequence, to an aqueous medium containing at  
CC least one complex of anchor DNA, attached to a solid support, and  
CC reporter DNA, where either a part of the anchor DNA or reporter DNA is  
CC designed to form a triple-strand structure with part of the test  
CC sequence. Triplex formation results in displacement of the reporter DNA  
CC which is detected as an indication of the presence of the DNA test  
CC sequence. The method is used to detect DNA sequences, particularly for  
CC identification of bacteria (by detecting genes for ribosomal RNA) in  
CC clinical samples, but also detection of oncogenes and Hepatitis B virus  
XX

Sequence 16 BP; 8 A; 0 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 16;

Best Local Similarity 91.7%; Pred. No. 1e+03;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

933 CCTCCTCTTCAT 944

|||||

15 CTTCTCTTCAT 4

RESULT 603

AAH46691

AAH46691 standard; DNA; 16 BP.

AAH46691;

19-SEP-2001 (first entry)

Target virus detection probe #12.

Target virus detection probe; FRET; labelled probe;

fluorescence resonance energy transfer; ss.

Synthetic.

Key Location/Qualifiers

modified\_base 12

/\*tag= a

/mod\_base= OTHER

/note= "modified by Cy5"

JP2000312589-A.

14-NOV-2000.

16-JUL-1999; 99JP-00203474.

04-MAR-1999; 99JP-00057132.

(BUNS-) BUNSHI BIOHOTOONICS KENKYUSHO KK.

WPI; 2001-400707/43.

Detecting a virus comprises a probe formed between at least two same energy donor fluorescent pigments (dfp) and an energy acceptor fluorescent pigment (afp) in which the energy from (dfp) is relayed to (afp) successively and transferred.

Disclosure; Page 10; 40pp; Japanese.

The present invention describes a method of detecting a target virus using fluorescence resonance energy transfer (FRET), involving reacting with a labelled probe formed between at least two same energy donor fluorescent pigments and an energy acceptor fluorescent pigment in which the energy from the former is relayed to the latter successively and transferred. The probe can be used for the detection of a target virus. The present sequence is a probe described in the exemplification of the invention

Sequence 16 BP; 3 A; 1 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 16;  
Best Local Similarity 91.7%; Pred. No. 1e+03; 0; Mismatches 1; Indels 0; Gaps 0;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 905 TCATTTTCTTTG 916  
| | | | | | | | | |  
DB 1 TCATTTTCTTTG 12

RESULT 604  
AAS15890/c  
ID AAS15890 standard; DNA; 16 BP.  
XX  
AC AAS15890;  
XX  
DT 23-JAN-2002 (first entry)  
XX  
DE Target feature for primer selection, used to screen regulatory genes.

XX Cancer; chemotherapy; gene therapy; neurological disorder;  
KW Alzheimer's disease; Huntington's disease; Parkinson's disease;  
KW cardiovascular disorder; myocardial hypertrophy; atherosclerosis;  
KW myocardial infarction; bone disorder; muscle disorder; osteoarthritis;  
KW osteoporosis; blood disorder; systematic lupus; primer design; ss.  
XX  
CS Synthetic.

XX WO200175162-A2.  
XX  
XX 11-OCT-2001.  
XX  
XX 29-MAR-2001; 2001WO-US010096.  
XX  
XX 31-MAR-2000; 2000US-0193888P.  
XX  
XX (UYLO-) UNIV LOUISVILLE RES FOUND INC.

XX Wang E;  
XX WPI; 2001-662978/76.  
XX

XX Array of nucleic acids selective for genes comprising common regulatory  
XX sequence, useful for identifying drug targets or disease markers and in  
XX drug screening.

XX Example 1; Page 20; 34pp; English.

XX The invention describes a novel array of nucleic acids each binding  
XX selectively to a gene comprising a regulatory sequence and a promoter,  
XX that require the presence of the nucleic acid for gene expression. The  
XX method is used to identify drug targets or disease-specific markers, and  
XX to determine the response of diseases to drugs or other treatments, e.g.  
XX to define risk factors; for diagnosis and prognosis of stages of cancer;  
XX to monitor chemotherapy or gene therapy; and for drug discovery (e.g. for  
XX neurological (e.g. Alzheimer's disease, Parkinson's disease and  
XX Huntington's disease), cardiovascular (e.g. myocardial hypertrophy,  
XX atherosclerosis and myocardial infarction), bone and muscle (e.g.  
XX osteoarthritis and osteoporosis), blood or circulatory diseases (e.g.  
XX systematic lupus) or cancer). The method provides rapid and sensitive  
XX analysis of genetic information associated with a common regulatory  
XX sequence, associated with a particular disease or state, and requires  
XX only very small amounts of material. Grouping genes from their  
XX regulators, rather than function, allows immediate association of  
XX specific pathways and quantification of changes in gene expression allows  
XX a gene hierarchy to be established. Only minor genes are selected for the  
XX microarray, this prevents their expression being obscured by that of  
XX strongly expressed genes (adjacent to them on the array). This sequence  
XX is the target feature of a regulatory gene identified by using database  
XX search methods and alignments based on the synthetic core element (see  
XX AAS15889) described in the method of the invention

XX Sequence 16 BP; 7 A; 3 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 16;  
Best Local Similarity 91.7%; Pred. No. 1e+03; 0; Mismatches 1; Indels 0; Gaps 0;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 900 CCTGTCATTTT 911  
| | | | | | | | | |  
DB 14 CCTGTCATTTT 3

RESULT 605  
ABK15234/c  
ID ABK15234 standard; DNA; 16 BP.  
XX  
AC ABK15234;  
XX  
DT 08-MAY-2002 (first entry)  
XX  
DE Human GHRHR promoter core element sequence.

XX Human; ds; promoter; core element; GHRHR; neurological disorder;  
KW cardiovascular disorder; bone disorder; muscle disorder; blood disorder;  
KW circulation disorder; cancer; Alzheimer's disease; Parkinson's disease;  
KW Huntington's disease; atherosclerosis; myocardial infarction;  
KW osteoarthritis; osteoporosis; autoimmune disorder; brain tumour;  
KW chronic lymphocytic leukaemia; acute lymphocytic leukaemia.

XX Homo sapiens.

XX US2002009736-A1.

XX 24-JAN-2002.

XX 29-MAR-2001; 2001US-00820531.

XX 31-MAR-2000; 2000US-0193888P.

XX (WANG/) WANG E.

XX Wang E;

XX WPI; 2002-171142/22.

XX Microarrays for screening regulatory gene associated with neurological  
XX disorders, cardiovascular disorders, bone and muscle disorders, blood or  
XX circulation related disorders, and cancer.

XX Example 1; Page 7; 14pp; English.

XX The invention relates to microarrays and primers useful for detecting and  
XX analysing expression of nucleic acids associated with disorders and  
XX diseases, e.g. neurological disorders, cardiovascular disorders, bone and  
XX muscle disorders, blood or circulation related disorders, and cancer e.g.  
XX an array comprising (at distinct locations on a substrate) nucleic acid  
XX molecules each selectively binding to a gene comprising a regulatory  
XX sequence and a promoter (each promoter interacts with a second nucleic  
XX acid molecule binding to the regulatory sequence or whose expression is  
XX dependent on this binding). The methods, microarrays and primers are used  
XX to analyse the expression of gene involved in disorders and disease  
XX states listed above especially Alzheimer's disease, Parkinson's disease,  
XX Huntington's disease, myocardial hypertrophy, atherosclerosis, myocardial  
XX infarction, osteoarthritis, osteoporosis, and autoimmune disorders,  
XX breast cancer, prostatic hypertrophy, prostatic cancer, colon cancer,  
XX chronic lymphocytic leukaemia, acute lymphocytic leukaemia, brain tumour,  
XX screening cancer, and hepatomas. The current technology of gene  
XX screening using large numbers of genes grouped by functional capability  
XX generates a tremendous amount of data, which produces subsequent problems  
XX in data evaluation. For example, when a known chip bearing the coding  
XX regions of 10000 genes is screened, it provides perhaps a few hundred  
XX genes whose expressions may display significant gain or loss for a given  
XX physiological state. Sorting out these few hundred genes into a hierarchy  
XX of respective importance in terms of upstream or downstream function is a  
XX very tedious task, requiring a lot of manpower and computing time. Using

cassettes of gene microarrays manufactured according to regulatory modality avoids this problem, i.e., positive or negative changes of gene expression on a given five or six DNA microarrays provides immediate assessment of which pathways are involved, since these microarrays are designed according to regulatory pathways. Furthermore, the quantitative levels of gain or loss of gene expression for a given gene provide self-evident implications of the hierarchic order of genes, with regard to the separation of a master gene switch versus pedestrian gene changes. Due to the genes being grouped into subsets according to regulatory modality for gene expression provides a platform for gene microarrays of similar abundance of gene expression. The present sequence is a core element sequence from the promoter of human growth hormone releasing hormone receptor (GHRHR) used in an experiment to demonstrate the method of the invention.

Sequence 16 BP; 7 A; 3 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 16;  
Best Local Similarity 91.7%; Pred. No. 1e+03;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

900 CTGGTCACTTT 911  
|||||||  
14 CTGGTCACTTT 3

RESULT 606

3T33714/C

ABT33714 standard; DNA; 16 BP.

ABT33714;

29-MAY-2003 (first entry)

Ribozyme substrate binding sequence SEQ ID No 65.

Cytostatic; gene therapy; apoptosis; cancer growth inhibition; drug screening; ss.

Unidentified.

WO200292840-A2.

21-NOV-2002.

14-MAY-2002; 2002WO-US015198.

14-MAY-2001; 2001US-0290927P.

(IMMU-) IMMUSOL INC.

Tritz R, Keily B, Habita C, Robbins J, Barber J;

WPI; 2003-129308/12.

New isolated nucleic acid molecule useful for regulating apoptosis induction in cells, for inhibiting the growth of cancer in subjects, and for drug screening.

Example 3; Page 41; 153pp; English.

The invention relates to a novel isolated molecule comprising bases 2-8 or 13-16 of 2 16 base pair sequences, or comprising a 1731 base pair sequence, all given in the specification or at least 95 % identity with the 1731 bp sequence. The nucleic acid molecule is useful in regulating apoptosis in cells and in drug screening. The method is useful in facilitating the induction of apoptosis in cells, in identifying an agent that can facilitate the induction of apoptosis in cells, and in inhibiting the growth of a cancer. This polynucleotide sequence represents a ribozyme binding substrate sequence relating to the invention

Sequence 16 BP; 8 A; 0 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 16;  
Best Local Similarity 91.7%; Pred. No. 1e+03;  
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

926 TTTTATCCTCC 937  
|||||||  
14 TTTTCTCCTCC 3

RESULT 607

AAT55663

ID AAT55663 standard; RNA; 15 BP.

AC AAT55663;

25-MAR-2003 (revised)

21-MAR-1997 (first entry)

Human TNF-alpha hammerhead ribozyme target sequence (nt position 193).

Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICMW-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; Philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS; ss.

Homo sapiens.

OS

XX

PN

XX

PD

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

(RIBO-) RIBOZYME PHARM INC.

Stinchcomb DT, Chowrira B, Ditzenz A, Draper KG, Dudycz LW;

Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, McSwiggen JA;

Modak A, Pavco F, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;

```

PI Tracz D, Usman N, Wincott FE, Woolf T;
XX WPI; 1995-351090/45.
XX Ribozymes having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
XX Claim 2; Page 241; 407pp; English.
XX The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves TNF-alpha mRNA at
CC the nucleotide base position indicated in the DE line. Regions of the
CC mRNA that do not form secondary folding structures and that contain
CC potential hammerhead and hairpin ribozyme cleavage sites were identified
CC by computer analysis. Ribozymes directed against these mRNA sequences
CC were designed and synthesised with modifications that improve their
CC nuclease resistance. The ribozymes are designed to cleave the target
CC sequences and thereby inhibit TNF-alpha expression, making them
CC potentially useful for treating rheumatoid arthritis, septic shock and
CC other inflammatory disorders including psoriasis, as well as for
CC treatment of AIDS. (Updated on 25-MAR-2003 to correct PI field.)
XX
XX Sequence 15 BP; 0 A; 8 C; 1 G; 0 T; 6 U; 0 Other;
SQ
Query Match 14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 46.7%; Pred. No. 1.1e+03;
Matches 7; Conservative 5; Mismatches 3; Indels 0; Gaps 0;

Qy 923 GCCYTTTATCCCTCC 937
Db |||: : : ||| : ||
1 GCCUCUCUCUCUCC 15

RESULT 608
AAT56958/c
ID AAT56959 standard; RNA; 15 BP.
XX
XX AAT56959;
XX
XX 27-AUG-2003 (revised)
XX 25-MAR-2003 (revised)
XX 24-APR-1997 (first entry)
XX
XX RSV 1C hammerhead ribozyme target sequence (nt. position 165).
XX
XX Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
XX gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
XX TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
XX Philadelphia chromosome; chronic myelogenous leukaemia; CML; cancer;
XX atherosclerosis; myocardial infarction; stroke; restenosis;
XX transplant rejection; rheumatoid arthritis; psoriasis;
XX myocardial ischaemia; Kawasaki disease; septic shock; HIV;
XX human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
XX ss.
XX
XX Respiratory syncytial virus.
XX
XX W09523225-A2.
XX
XX 31-AUG-1995.
XX
XX 23-FEB-1995; 95WO-IB000156.
XX
XX 23-FEB-1994; 94US-00201109.
XX 29-MAR-1994; 94US-00218934.
XX 04-APR-1994; 94US-00222795.
XX 07-APR-1994; 94US-00224483.
XX 15-APR-1994; 94US-00227958.
XX 15-APR-1994; 94US-00228041.
XX 18-MAY-1994; 94US-00245736.
XX 06-JUL-1994; 94US-00271280.

```

```

PR 15-AUG-1994; 94US-00291932.
PR 16-AUG-1994; 94US-00291433.
PR 17-AUG-1994; 94US-00292620.
PR 19-AUG-1994; 94US-00293520.
PR 02-SEP-1994; 94US-00300000.
PR 08-SEP-1994; 94US-00303039.
PR 23-SEP-1994; 94US-00311486.
PR 23-SEP-1994; 94US-00311749.
PR 28-SEP-1994; 94US-00314397.
PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisch K, Matulic-Adamic J, Mcswigen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott FE, Woolf T;
XX WPI; 1995-351090/45.
DR
XX Ribozymes having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
XX Claim 2; Page 269; 407pp; English.
XX
XX The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves mRNA coding for a
CC protein of respiratory syncytial virus (RSV) at the nucleotide base
CC position indicated in the DE line. Regions of the mRNA that do not form
CC secondary folding structures and that contain potential hammerhead and
CC hairpin ribozyme cleavage sites were identified by computer analysis.
CC Ribozymes directed against these mRNA sequences were designed and
CC synthesised with modifications that improve their nuclease resistance.
CC The ribozymes cleave the target sequences and can be used for treatment
CC and diagnosis of RSV infection. (Updated on 25-MAR-2003 to correct PI
CC field.) (Updated on 27-AUG-2003 to correct OS field.)
XX
XX Sequence 15 BP; 6 A; 3 C; 1 G; 0 T; 5 U; 0 Other;
SQ
Query Match 14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 942 CATTGGTTTAAATGTA 956
Db |||: : : ||| : |||
15 CGTTAGTTTAAATGTA 1

RESULT 609
AAT56971/c
ID AAT56971 standard; RNA; 15 BP.
XX
XX AAT56971;
XX
XX 27-AUG-2003 (revised)
XX 25-MAR-2003 (revised)
XX 24-APR-1997 (first entry)
XX
XX RSV 1C hammerhead ribozyme target sequence (nt. position 196).
XX
XX Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
XX gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
XX intercellular adhesion molecule; rel A; tumour necrosis factor;
XX TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
XX translocation; chronic myelogenous leukaemia; CML; cancer;

```

Philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS; ss.

Respiratory syncytial virus.

WO9523225-A2.

31-AUG-1995.

23-FEB-1995; 95WO-IB000156.

23-FEB-1994; 94US-00201109.

29-MAR-1994; 94US-00218934.

04-APR-1994; 94US-00222795.

07-APR-1994; 94US-00224483.

15-APR-1994; 94US-00227958.

15-APR-1994; 94US-00228041.

18-MAY-1994; 94US-00245736.

06-JUL-1994; 94US-00271280.

15-AUG-1994; 94US-00291932.

16-AUG-1994; 94US-00291433.

17-AUG-1994; 94US-00292620.

19-AUG-1994; 94US-00293520.

02-SEP-1994; 94US-00300000.

08-SEP-1994; 94US-00303039.

23-SEP-1994; 94US-00311486.

23-SEP-1994; 94US-00311749.

28-SEP-1994; 94US-00314397.

03-OCT-1994; 94US-00316771.

07-OCT-1994; 94US-00319492.

11-OCT-1994; 94US-00321993.

04-NOV-1994; 94US-00334847.

10-NOV-1994; 94US-00337608.

28-NOV-1994; 94US-00345516.

16-DEC-1994; 94US-00357577.

23-DEC-1994; 94US-00363233.

30-JAN-1995; 95US-00380734.

(RIBO-) RIBOZYME PHARM INC.

Stinchcomb DT, Chowira B, Drenzo A, Draper KG, Dudycz LW;

Grimm S, Karpeisky A, Kisch K, Matulic-Adamic J, McSwiggen JA;

Modak A, Pavco P, Beigelman L, Sullivan SM, Sweedler D, Thompson JD;

Tracz D, Usman N, Wincott FE, Woolf T;

WPI; 1995-351090/45.

Ribozymes having modified bases and methods for producing them - for use

in inhibiting disease related genes.

Claim 2; Page 269; 407pp; English.

The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves mRNA coding for a protein of respiratory syncytial virus (RSV) at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the target sequences and can be used for treatment and diagnosis of RSV infection. (Updated on 25-MAR-2003 to correct PI field.) (Updated on 27-AUG-2003 to correct OS field.)

Sequence 15 BP; 8 A; 3 C; 1 G; 0 T; 3 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 944 TTGGTTTAAATGATC 958

Db 15 TTGATTGATGATC 1

RESULT 610

AA64778

ID AAX64778 standard; RNA; 15 BP.

XX AAX64778;

XX 20-JUL-1999 (first entry)

XX Human B7-1 hammerhead ribozyme target SEQ ID NO:1410.

XX Arthritic condition; graft tolerance; immune response; target; cleavage; hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase; stromelysin; synovial membrane; joint; arthritis; osteoarthritis; KW rheumatoid arthritis; autoimmune disease; allergy; inflammation; KW diagnosis; ss.

XX Homo sapiens.

XX WO9618736-A2.

XX 20-JUN-1996.

XX 22-NOV-1995; 95WO-US015516.

XX 13-DEC-1994; 94US-00354920.

XX 23-DEC-1994; 94US-00363253.

XX 23-DEC-1994; 94US-00363254.

XX 17-FEB-1995; 95US-00390850.

XX 20-APR-1995; 95US-00426124.

XX 02-MAY-1995; 95US-00432874.

XX 04-MAY-1995; 95US-00434509.

XX 07-JUL-1995; 95US-0000951P.

XX 07-JUL-1995; 95US-0000974P.

XX 07-AUG-1995; 95US-00512861.

XX 05-OCT-1995; 95US-00541365.

XX (RIBO-) RIBOZYME PHARM INC.

XX Beigelman L, Stinchcomb DT, Jarvis T, Draper K, Pavco P;

XX McSwiggen J, Gustafson J, Usman N, Wincott F, Matulic-Adamic J;

XX Karpeisky A, Thompson JD, Modak A, Burgin A;

XX WPI; 1996-300653/30.

XX Enzymatic nucleic acid molecules having a hammer-head motif - used for

the treatment of arthritis, induction of graft tolerance or treatment of

auto-immune diseases.

XX Claim 10; Page 168; 307pp; English.

XX The present invention describes a novel enzymatic nucleic acid (ENA)

CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues

CC; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least

CC ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's

CC can inhibit collagenase and stromelysin production in the synovial

CC membrane of joints for the treatment or prevention of arthritis,

CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also

CC be used to treat antigen presenting cells of a donor to induce tolerance

CC in a recipient to an alloantigen of a donor. They can also be used for

CC enhancing graft tolerance or for treating autoimmune disease, and for

CC treating allergies and other inflammatory conditions. The ENA's can also

CC be used in diagnosis. Ribozyme therapy impacts on the expression of

CC stromelysin without introducing the non-specific effects upon gene

CC expression which accompany treatment with retinoids and dexamethasone.

CC The concentration of ribozyme required to affect a therapeutic treatment

CC is lower than that required of antisense molecules, and is highly

CC specific. The present sequence is used in the exemplification of the

```

CC present invention
XX Sequence 15 BP; 4 A; 2 C; 2 G; 0 T; 7 U; 0 Other;
SQ Query Match 14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 40.0%; Pred. No. 1.1e+03;
Matches 6; Conservative 6; Mismatches 3; Indels 0; Gaps 0;

QY 944 TTGGTTTAAATGATC 958
DB 1 UUUGCUAAUGUAC 15

RESULT 611
AAT46989/c
ID AAT46989 standard; DNA; 15 BP.
XX
AC AAT46989;
XX
XX 01-DEC-1997 (first entry)
XX
DE HLA sequence 28.
XX
XX apparatus; enhanced detection; biological reaction; biochip;
XX fluid system; diagnosis; analysis; multistep; multiplex reaction;
XX synthesis; biopolymer; automated DNA analysis system; self-addressable;
XX self-assembling; electronic; target probe; denaturation; APEX chip; ss.
XX
OS Synthetic.
XX
XX WO9712030-A1.
XX
XX 03-APR-1997.
XX
XX 06-SEP-1996; 96WO-US014353.
XX
XX 27-SEP-1995; 95US-00534454.
XX
XX (NANO-) NANOGEN INC.
XX
XX Heller MJ, Oconnell JP, Juncosa RD, Sosnowski RG, Jackson TR;
XX WPI; 1997-212892/19.
XX
XX Self-addressable and self-assembling system for biological reactions -
XX comprises array of specific binding regions on biochip, also new
XX fluorescence detection system and stringency control device.
XX
XX Disclosure; Fig 10; 69pp; English.
XX
XX The invention concerns an apparatus for enhanced detection of a
XX biological reaction between a sample and an active area of a biochip,
XX comprises the biochip and a fluidic system designed to pass the sample
XX over the active area. The apparatus can be used for diagnosis, analysis
XX and multistep/multiplex reactions (including synthesis of biopolymers),
XX especially those involving nucleic acid hybridisation (but also antigen-
XX antibody reactions). Use of a flow system improves diagnostic efficiency,
XX allows more complete sampling and the detection device provides imaging
XX of very small volumes. Together these elements provide a highly automated
XX DNA analysis system from self-addressable and self-assembling electronic
XX components. AAT46987-91 are HLA sequences used in an experiment using the
XX apparatus of the invention
XX
XX Sequence 15 BP; 4 A; 2 C; 2 G; 7 T; 0 U; 0 Other;
SQ Query Match 14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 929 TATCCCTCTCTTCA 943
DB 15 TAGCCCTCTCTTCA 1

RESULT 612
AAT84340/c
ID AAT84340 standard; DNA; 15 BP.
XX
AC AAT84340;
XX
XX 11-NOV-1997 (first entry)
XX
XX Mannose binding protein gene codon 57 mutant PCR primer.
XX
XX Mannose binding protein; MBP gene; human; infection; depression;
XX chronic fatigue syndrome; irritable bowel syndrome; HBV;
XX hepatitis B virus; Gulf War syndrome; polymerase chain reaction; PCR;
XX primer; dot-blot hybridisation; probe; ss.
XX
OS Synthetic.
XX
XX WO9705279-A1.
XX
XX 13-FEB-1997.
XX
XX 25-JUL-1996; 96WO-GB001819.
XX
XX 27-JUL-1995; 95GB-00015393.
XX
XX 13-OCT-1995; 95GB-00021025.
XX
XX 09-JUL-1996; 96GB-00014414.
XX
XX (UNLO) IMPERIAL COLLEGE SCI TECHNOLOGY & MED.
XX
XX Thomas HC, Summerfield JA, Main J;
XX WPI; 1997-145713/13.
XX
XX Predicting susceptibility to, and outcome of, infection - comprises
XX determining presence of mutation in the mannose binding protein gene,
XX esp. in codon 52 of exon 1.
XX
XX Claim 21; Page 32; 42pp; English.
XX
XX This primer sequence is based on a human mannose binding protein (MBP)
XX gene exon 1 codon 57 mutant sequence. Primers (AAT84335-40) based on wild
XX -type or mutant exon 1 codon 52, codon 54 or codon 57 sequences can be
XX utilised in claimed kit and sequence-specific oligonucleotide (SSO) dot-
XX blot hybridisation methods for establishing the MBP genotype of a
XX subject. A mutation in codon 52 of exon 1 is indicative of susceptibility
XX to chronic viral infection, chronic fatigue syndrome, depressive disease,
XX irritable bowel syndrome, Gulf War syndrome and/or hepatitis B virus
XX infection. A mutation in one or more of codons 52, 54 or 57 of exon 1 of
XX the MBP gene of a child or foetus is indicative of susceptibility to
XX recurrent childhood infection and premature birth
XX
XX Sequence 15 BP; 9 A; 2 C; 4 G; 0 T; 0 U; 0 Other;
SQ Query Match 14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 934 CTCCTCTCTCTTGGT 948
DB 15 CTTTCTCTCTTGGT 1

RESULT 613
AAI14658
ID AAI14658 standard; DNA; 15 BP.
XX
XX AAI14658;
XX
XX 24-MAR-1999 (first entry)
XX
XX Triple helix forming nucleotides 13280-13294 of the dystrophin gene.
XX

```

Triple-helix forming region; Triplex formation; DNA detection; identification; bacteria; oncogene; virus; ds.

Homo sapiens.

US5861244-A.

19-JAN-1999.

22-DEC-1993; 93US-00173489.

29-OCT-1992; 92US-00968436.

(PROF-) PROFILE DIAGNOSTIC SCI INC.

Hepburn AG, Wang C;

WPI; 1999-130384/11.

Assay of genetic sequences based on triplex formation from double stranded analyte - and hybrid of anchor and reporter sequences, with reporter released if triplex formation occurs, used e.g. to identify bacteria.

Disclosure; Col 15-16; 168pp; English.

The present sequence represents a potential triple-helix forming region. It can be used to demonstrate the assay of the invention. The assay comprises adding a sample containing double-stranded DNA test sequences, e.g. containing the present sequence, to an aqueous medium containing at least one complex of anchor DNA, attached to a solid support, and reporter DNA, where either a part of the anchor DNA or reporter DNA is designed to form a triple-strand structure with part of the test sequence. Triplex formation results in displacement of the reporter DNA which is detected as an indication of the presence of the DNA test sequence. The method is used to detect DNA sequences, particularly for identification of bacteria (by detecting genes for ribosomal RNA) in clinical samples, but also detection of oncogenes and Hepatitis B virus

Sequence 15 BP; 0 A; 3 C; 0 G; 12 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Y 908 TTTTCTTTGGCTTT 922

|||||

1 TTTTCTTTTCTTT 15

RESULT 614

AA29142/C

AAA29142 standard; DNA; 15 BP.

AAA29142;

12-SEP-2000 (first entry)

Ribosome binding site A for use in toggle switch constructs.

Toggle switch; P-L promoter; cits gene; lacI; Escherichia coli; P-trc; ribosome binding site; promoter; adjustable-threshold switch; model; multi-state oscillator; gene regulation; cell cycle; cancer; cytostatic; gene therapy; ss.

Synthetic.

WO200032748-A1.

08-JUN-2000.

01-DEC-1999; 99WO-US028592.

02-DEC-1998; 98US-0110616P.

(UYBO-) UNIV BOSTON.

Gardner TS, Collins JJ;

WPI; 2000-412301/35.

Altering gene transcription for treating disorders such as cancer, by exposing host cell transfected with composition having two constructs operably linked to promoter, to two different agents inducing transcription.

Example 2; Fig 22; 116pp; English.

AAA29142-49 are oligonucleotides comprising ribosome binding sites used in construction of a "toggle switch". The toggle switch constructs switch expression of a gene of interest between stable "on" or "off" states in response to a transiently applied agent. Other genetic "applets", i.e. a network of interacting genes, are provided. The genetic applets are exemplified by toggle switch constructs, adjustable-threshold switch constructs (for expressing a gene of interest in response to the sustained application of an agent at a concentration above or below a desired threshold concentration) and multi-state oscillator constructs (where expression of a gene of interest is periodically altered in the absence of administration of agents which are extraneous to the construct). The applets provide a model for gene networks which have applications in clinical therapy, biomedical research and biotechnology. The toggle switch constructs contain two mutually inhibitory genes. Promoter 1, efficiently transcribes gene 1 unless inhibited by the repressor protein encoded by gene 2. Promoter 2 efficiently transcribes gene 2 unless inhibited by the repressor protein encoded by gene 1. A host cell can be transfected with the two constructs and exposed, in any order, to two agents, one inducing transcription of the gene of interest, the other repressing it. In particular, the constructs are useful for controlling the cell cycle, for treating cancer, and for developing a predictive theory of gene expression

Sequence 15 BP; 9 A; 0 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 924 CCTTTTATCCCTCCT 938

|||||

15 CATTTTTCCTCCT 1

RESULT 615

AAA48271/C

AAA48271 standard; DNA; 15 BP.

AAA48271;

28-SEP-2000 (first entry)

E. coli ompA gene fragment, comprising ribosome binding site and 5'UTR.

Antigen presentation; vaccine; infectious disease; allergy; cancer; molecular scaffold; immune response; farm animal; organism; hGH; immunostimulatory; cytostatic; anti-allergy; human growth hormone; FOS leucine zipper; OmpA; outer membrane protein; ss.

Escherichia coli.

WO200032227-A2.

08-JUN-2000.

30-NOV-1999; 99WO-IB001925.

30-NOV-1998; 98US-0110414P.



08-JUL-1999; 99US-0142788P.  
(CYTO-) CYTOS BIOTECHNOLOGY AG.  
Renner WA, Hennecke F, Nieba L, Bachmann M;  
WPI; 2000-412159/35.  
Composition for use as vaccine against infectious diseases and in treatment of cancer and allergies comprises non-naturally occurring molecular scaffold and antigen or antigenic determinant.  
Example 6; Page 47; 102pp; English.  
A new method for developing vaccines has been identified, in which a non-naturally occurring molecular scaffold, having a core particle and a covalently attached organiser, is attached to an antigen or antigenic determinant. The scaffold and antigen or antigenic determinant interact to form an ordered and repetitive antigen array. The composition is useful as a vaccine against infectious diseases, to induce immune responses in farm animals and also in the treatment of cancer and allergies. The human Growth Hormone, hGH, protein was used as the scaffold in the present invention, and was fused to E. coli outer membrane protein. The FOS signal sequence which is a FOS leucine zipper protein domain. The FOS domain formed the antigen attachment site. The present sequence is E. coli ompA gene fragment, comprising the ribosome binding site and 5'UTR. This sequence was used in the construction of the pAV vector series. The pAV vectors were used to express the FOS fusion proteins in E. coli

Sequence 15 BP; 8 A; 1 C; 5 G; 1 T; 0 U; 0 Other;  
Query Match 14.0%; Score 10.2; DB 1; Length 15;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 924 CCTTTATCCCTCT 938  
DQ 15 CGTTTTTACCTCT 1

RESULT 616  
AAC65672  
ID AAC65672 standard; DNA; 15 BP.  
AC AAC65672;  
XX  
DT 16-FEB-2001 (first entry)  
XX  
DE Human c-myc CMAS primer SEQ ID NO 2.  
XX  
KW Primer; antisense; CMAS; covalently closed multiple antisense;  
KW secondary structure; cytosolic; immunosuppressive; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200061595-A1.  
XX  
PD 19-OCT-2000.  
XX  
XX 04-APR-2000; 2000WO-KR000305.  
XX  
XX 08-APR-1999; 99KR-00012297.  
XX  
PA (PARK/) PARK J.  
XX  
PI Park J;  
XX  
XX WPI; 2000-679458/66.  
XX  
PT Antisense oligonucleotides comprising antisense sequences to mRNA regions with reduced secondary structure to improve its target sequence specificity, and closed type construction to improve stability against

PT nucleases.  
XX  
PS Claim 5; Page 63; 66pp; English.  
XX  
XX This invention describes a novel antisense oligonucleotide (oligo) (I) which has improved target sequence specificity by containing one or more antisense sequence(s) to mRNA regions which reduced secondary structure, and improved stability against nuclease activity by having closed type construction. The products of the invention have cytostatic and immunosuppressive activity. (I) is stable to nuclease activity, shows a significant specificity to gene expression and has better antisense effect. One micro g each of non-specific control-phosphodiester oligo (liner 60 mer) and the CMAS-oligo were incubated with either raw human serum, FBS (fetal bovine serum) and calf serum or exonuclease III. AS-oligos were then extracted. As a result of CMAS-oligo, linear 60 mer oligo was completely digested after 24 hr incubation in the presence of serum. The closed-type CMAS-oligo was remained mostly intact after 24 hour incubation with raw human serum, FBS, and calf serum, exhibiting significantly improved stability than the linear one against nucleases

Sequence 15 BP; 1 A; 3 C; 2 G; 9 T; 0 U; 0 Other;  
Query Match 14.0%; Score 10.2; DB 1; Length 15;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 902 TGGTCATTTCTTTG 916  
DQ 1 TGATCTTCTCTTTG 15

RESULT 617  
AAF48960  
ID AAF48960 standard; DNA; 15 BP.  
XX  
AC AAF48960;  
XX  
DT 30-MAR-2001 (first entry)  
XX  
DE IGFBP3 oligonucleotide #2380.  
XX  
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
KW cytosolic; dermatological; cardiant; virucide; ophthalmological; keloid;  
KW skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;  
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
KW hyperneovascular condition; hyperplasia; kidney disease;  
KW neovascular condition of the retina; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO200078341-A1.  
XX  
XX 28-DEC-2000.  
XX  
XX 21-JUN-2000; 2000WO-AU000693.  
XX  
XX 21-JUN-1999; 99US-0140345P.  
XX  
PA (MURD-) MURDOCH CHILDRENS RES INST.  
XX  
XX Wraight CJ, Werther GA, Edmondson SR;  
XX  
XX WPI; 2001-041421/05.  
XX  
XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.  
XX  
XX Example 7; Page 59; 201pp; English.  
PS  
XX

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 1 A; 1 C; 0 G; 13 T; 0 U; 0 Other;  
 Query Match 14.0%; Score 10.2; DB 1; Length 15;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

908 TTTCTTGGCTCTT 922  
 |||||  
 1 TTTCTTTATTTT 15

RESULT 618  
 AAF52585/c  
 ID AAF52585 standard; DNA; 15 BP.  
 AC AAF52585;  
 XX 30-MAR-2001 (first entry)  
 XX IGF-I oligonucleotide #3545.  
 KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.

Homo sapiens.  
 WO200078341-A1.  
 28-DEC-2000.  
 21-JUN-2000; 2000WO-AU000693.  
 21-JUN-1999; 99US-0140345P.  
 (MURD-) MURDOCH CHILDRENS RES INST.  
 Wright CJ, Werther GA, Edmondson SR;  
 WPI; 2001-041421/05.  
 Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 8; Page 84; 201pp; English.  
 The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of

inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 7 A; 1 C; 7 G; 0 T; 0 U; 0 Other;  
 Query Match 14.0%; Score 10.2; DB 1; Length 15;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

919 CTTTGCCTTTATCC 933  
 |||||  
 15 CTTTGCCTCTTCC 1

RESULT 619  
 AAF53512  
 ID AAF53512 standard; DNA; 15 BP.  
 AC AAF53512;  
 XX 30-MAR-2001 (first entry)  
 XX IGF-I oligonucleotide #4472.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.

Homo sapiens.  
 WO200078341-A1.  
 28-DEC-2000.  
 21-JUN-2000; 2000WO-AU000693.  
 21-JUN-1999; 99US-0140345P.  
 (MURD-) MURDOCH CHILDRENS RES INST.  
 Wright CJ, Werther GA, Edmondson SR;  
 WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 8; Page 90; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-

CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,  
 CC brain or skin, growth factor-mediated malignancies, other sclerotic  
 CC disease, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia  
 XX

SQ Sequence 15 BP; 0 A; 8 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;  
 Best Local Similarity 80.0%; Pred. NO. 1.1e+03;  
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 924 CCTTTTATCCCTCCT 938

DB 1 CCTTTTCTCTCCT 15

RESULT 620

AAF50426  
 ID AAF50426 standard; DNA; 15 BP.

XX AAF50426;

AC AAF50426;

DT 30-MAR-2001 (first entry)

DE IGF-I oligonucleotide #1386.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cyostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.

XX Homo sapiens.

XX WO200078341-A1.

XX 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

XX Wright CJ, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 PT inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.

XX Example 8; Page 69; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,

CC brain or skin, growth factor-mediated malignancies, other sclerotic  
 CC disease, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia  
 XX

SQ Sequence 15 BP; 2 A; 5 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;  
 Best Local Similarity 80.0%; Pred. NO. 1.1e+03;  
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 919 CTTTGCCCTTTTATCC 933

DB 1 CTTTGCTTCAATCC 15

RESULT 621

AAF50427

ID AAF50427 standard; DNA; 15 BP.

XX AAF50427;

AC AAF50427;

DT 30-MAR-2001 (first entry)

DE IGF-I oligonucleotide #1387.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cyostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.

XX Homo sapiens.

XX WO200078341-A1.

XX 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

XX Wright CJ, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 PT inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.

XX Example 8; Page 70; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,  
 CC brain or skin, growth factor-mediated malignancies, other sclerotic  
 CC disease, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia  
 XX

Sequence 15 BP; 2 A; 5 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

920 TTGCTTTTATCCC 934  
|||||  
1 TTGCTTTCAATCCC 15

SULT 622

F53501

AAF53501 standard; DNA; 15 BP.

AAF53501;

30-MAR-2001 (first entry)

IGF-I oligonucleotide #4461.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;  
IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
hyperneovascular condition; hyperplasia; kidney disease;  
neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
inhibits or reduces growth factor mediated cell proliferation and/or  
inflammation.

Example 8; Page 90; 201pp; English.

The present invention relates to a method for ameliorating the effects of  
skin disorders. The method comprises contacting the skin with an  
antisense oligonucleotide, (for Insulin-like Growth factor [IGF]-1  
receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
inhibiting or reducing growth factor mediated cell proliferation,  
inflammation and/or other disorders. The present sequence is an  
oligonucleotide which can be used to design the antisense  
oligonucleotides of the present invention (see AAF45151 and AAF45153-  
F45161). The method is useful for ameliorating the effects of psoriasis,  
ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
hyperneovascular condition such as a neovascular condition of the retina,  
brain or skin, growth factor-mediated malignancies, other sclerotic  
disease, kidney disease, hyperproliferation of the inside of blood  
vessels or any other hyperplasia

Sequence 15 BP; 0 A; 7 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 921 TTGCTTTTATCCCCT 935

Db 1 TTCCCTGTCTCCCT 15

RESULT 623

AAF47198/C

ID AAF47198 standard; DNA; 15 BP.

XX AC

XX AAF47198;

XX DT 30-MAR-2001 (first entry)

XX DE IGFBP3 oligonucleotide #618.

XX KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;  
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
KW hyperneovascular condition; hyperplasia; kidney disease;  
KW neovascular condition of the retina; ss.

XX OS Homo sapiens.

XX PN WO200078341-A1.

XX PD 28-DEC-2000.

XX PF 21-JUN-2000; 2000WO-AU000693.

XX PR 21-JUN-1999; 99US-0140345P.

XX PA (MURD-) MURDOCH CHILDRENS RES INST.

XX PI Wright CJ, Werther GA, Edmondson SR;

XX DR WPI; 2001-041421/05.

XX PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
PT inhibits or reduces growth factor mediated cell proliferation and/or  
PT inflammation.  
XX Example 7; Page 48; 201pp; English.

XX CC The present invention relates to a method for ameliorating the effects of  
CC skin disorders. The method comprises contacting the skin with an  
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
CC inhibiting or reducing growth factor mediated cell proliferation,  
CC inflammation and/or other disorders. The present sequence is an  
CC oligonucleotide which can be used to design the antisense  
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
CC F45161). The method is useful for ameliorating the effects of psoriasis,  
CC ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
CC hyperneovascular condition such as a neovascular condition of the retina,  
CC brain or skin, growth factor-mediated malignancies, other sclerotic  
CC disease, kidney disease, hyperproliferation of the inside of blood  
CC vessels or any other hyperplasia

XX SQ Sequence 15 BP; 8 A; 3 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 902 TGCTCATTTTCTTTG 916

|||||

```

fb      15 TCATGATTATCTTGT 1
RESULT 624
AAF48479
ID      AAF48479 standard; DNA; 15 BP.
XX
AC
XX
DT      30-MAR-2001 (first entry)
XX
DE      IGFBP3 oligonucleotide #1899.
XX
KW      Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW      cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW      skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW      IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW      growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
KW      keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW      hyperneovascular condition; hyperplasia; kidney disease;
KW      neovascular condition of the retina; ss.
XX
OS      Homo sapiens.
XX
PN      WO200078341-A1.
XX
PD      28-DEC-2000.
XX
PF      21-JUN-2000; 2000WO-AU000693.
XX
PR      21-JUN-1999; 99US-0140345P.
XX
PA      (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI      Wright CJ, Werther GA, Edmondson SR;
XX
DR      WPI; 2001-041421/05.
XX
PT      Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT      UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT      inhibits or reduces growth factor mediated cell proliferation and/or
PT      inflammation.
XX
PS      Example 7; Page 56; 201pp; English.
XX
CC      The present invention relates to a method for ameliorating the effects of
CC      skin disorders. The method comprises contacting the skin with an
CC      antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1
CC      receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC      inhibiting or reducing growth factor mediated cell proliferation,
CC      inflammation and/or other disorders. The present sequence is an
CC      oligonucleotide which can be used to design the antisense
CC      oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC      F45161). The method is useful for ameliorating the effects of psoriasis,
CC      ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
CC      neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC      hyperneovascular condition such as a neovascular condition of the retina,
CC      brain or skin, growth factor-mediated malignancies, other sclerotic
CC      disease, kidney disease, hyperproliferation of the inside of blood
CC      vessels or any other hyperplasia
XX
SQ      Sequence 15 BP; 2 A; 5 C; 0 G; 8 T; 0 U; 0 Other;
Query Match      14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      927 TTTATCCCTCTCTT 941
      |||||
Db      1 TTCATCTCTCATCT 15

RESULT 625
AAF51294
ID      AAF51294 standard; DNA; 15 BP.
XX
AC
XX
DT      30-MAR-2001 (first entry)
XX
DE      IGFBP3 oligonucleotide #1898.
XX
KW      Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW      cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW      skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW      IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW      growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
KW      keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW      hyperneovascular condition; hyperplasia; kidney disease;
KW      neovascular condition of the retina; ss.
XX
OS      Homo sapiens.
XX
PN      WO200078341-A1.
XX
PD      28-DEC-2000.
XX
PF      21-JUN-2000; 2000WO-AU000693.
XX
PR      21-JUN-1999; 99US-0140345P.
XX
PA      (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI      Wright CJ, Werther GA, Edmondson SR;
XX
DR      WPI; 2001-041421/05.
XX
PT      Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT      UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT      inhibits or reduces growth factor mediated cell proliferation and/or
PT      inflammation.
XX
PS      Example 7; Page 56; 201pp; English.
XX
CC      The present invention relates to a method for ameliorating the effects of
CC      skin disorders. The method comprises contacting the skin with an
CC      antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1
CC      receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC      inhibiting or reducing growth factor mediated cell proliferation,
CC      inflammation and/or other disorders. The present sequence is an
CC      oligonucleotide which can be used to design the antisense
CC      oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC      F45161). The method is useful for ameliorating the effects of psoriasis,
CC      ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
CC      neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC      hyperneovascular condition such as a neovascular condition of the retina,
CC      brain or skin, growth factor-mediated malignancies, other sclerotic
CC      disease, kidney disease, hyperproliferation of the inside of blood
CC      vessels or any other hyperplasia
XX
SQ      Sequence 15 BP; 2 A; 5 C; 0 G; 8 T; 0 U; 0 Other;
Query Match      14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      926 TTTTATCCCTCTCTCT 940
      |||||
Db      1 TTTTCATCTCTCATCT 15

RESULT 626
AAF51294/c
ID      AAF51294 standard; DNA; 15 BP.
XX
AC
XX
DT      30-MAR-2001 (first entry)
XX
DE      IGFBP3 oligonucleotide #1898.
XX
KW      Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW      cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW      skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW      IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW      growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
KW      keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW      hyperneovascular condition; hyperplasia; kidney disease;
KW      neovascular condition of the retina; ss.
XX
OS      Homo sapiens.
XX
PN      WO200078341-A1.
XX
PD      28-DEC-2000.
XX
PF      21-JUN-2000; 2000WO-AU000693.
XX
PR      21-JUN-1999; 99US-0140345P.
XX
PA      (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI      Wright CJ, Werther GA, Edmondson SR;
XX
DR      WPI; 2001-041421/05.
XX
PT      Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT      UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT      inhibits or reduces growth factor mediated cell proliferation and/or
PT      inflammation.
XX
PS      Example 7; Page 56; 201pp; English.
XX
CC      The present invention relates to a method for ameliorating the effects of
CC      skin disorders. The method comprises contacting the skin with an
CC      antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1
CC      receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC      inhibiting or reducing growth factor mediated cell proliferation,
CC      inflammation and/or other disorders. The present sequence is an
CC      oligonucleotide which can be used to design the antisense
CC      oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC      F45161). The method is useful for ameliorating the effects of psoriasis,
CC      ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
CC      neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC      hyperneovascular condition such as a neovascular condition of the retina,
CC      brain or skin, growth factor-mediated malignancies, other sclerotic
CC      disease, kidney disease, hyperproliferation of the inside of blood
CC      vessels or any other hyperplasia
XX
SQ      Sequence 15 BP; 2 A; 5 C; 0 G; 8 T; 0 U; 0 Other;
Query Match      14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      926 TTTTATCCCTCTCTCT 940
      |||||
Db      1 TTTTCATCTCTCATCT 15

```

30-MAR-2001 (first entry)  
 IGF-I oligonucleotide #2254.  
 Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 hyperneovascular condition; hyperplasia; kidney disease;  
 neovascular condition of the retina; ss.  
 Homo sapiens.  
 WO200078341-A1.  
 28-DEC-2000.  
 21-JUN-2000; 2000WO-AU000693.  
 21-JUN-1999; 99US-0140345P.  
 (MURD-) MURDOCH CHILDRENS RES INST.  
 Wright CJ, Werther GA, Edmondson SR;  
 WPI; 2001-041421/05.  
 Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 inhibits or reduces growth factor mediated cell proliferation and/or  
 inflammation.  
 Example 8; Page 75; 201pp; English.  
 The present invention relates to a method for ameliorating the effects of  
 skin disorders. The method comprises contacting the skin with an  
 antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 inhibiting or reducing growth factor mediated cell proliferation,  
 inflammation and/or other disorders. The present sequence is an  
 oligonucleotide which can be used to design the antisense  
 oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 F45161). The method is useful for ameliorating the effects of psoriasis,  
 ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 hyperneovascular condition such as a neovascular condition of the retina,  
 brain or skin, growth factor-mediated malignancies, other sclerotic  
 disease, kidney disease, hyperproliferation of the inside of blood  
 vessels or any other hyperplasia  
 Sequence 15 BP; 6 A; 1 C; 7 G; 1 T; 0 U; 0 Other;  
 Query Match 14.0%; Score 10.2; DB 1; Length 15;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 930 ATCCCTCTCTCTCAT 944  
 |||||  
 15 ATCTCTCCGCTCTCT 1  
 RESULT 627  
 AF50092/C  
 D AAF50092 standard; DNA; 15 BP.  
 X C  
 X C AAF50092;  
 X T 30-MAR-2001 (first entry)  
 X I  
 X E IGF-I oligonucleotide #1052.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.  
 XX Homo sapiens.  
 OS WO200078341-A1.  
 XX 28-DEC-2000.  
 PD 21-JUN-2000; 2000WO-AU000693.  
 PF 21-JUN-1999; 99US-0140345P.  
 XX (MURD-) MURDOCH CHILDRENS RES INST.  
 PA Wright CJ, Werther GA, Edmondson SR;  
 PI WPI; 2001-041421/05.  
 DR Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 XX inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.  
 PT Example 8; Page 67; 201pp; English.  
 PS The present invention relates to a method for ameliorating the effects of  
 XX skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,  
 CC brain or skin, growth factor-mediated malignancies, other sclerotic  
 CC disease, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia  
 XX Sequence 15 BP; 10 A; 3 C; 2 G; 0 T; 0 U; 0 Other;  
 SQ Query Match 14.0%; Score 10.2; DB 1; Length 15;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 915 TGCTCTTTGCTTTT 929  
 |||||  
 15 TGCTCTTTGCTTTTCT 1  
 QY Db  
 RESULT 628  
 AAF48963  
 ID AAF48963 standard; DNA; 15 BP.  
 XX AC AAF48963;  
 XX X  
 XX 30-MAR-2001 (first entry)  
 DT DE IGFBP3 oligonucleotide #2383.  
 XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;

KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 FW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 VW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 XW hyperneovascular condition; hyperplasia; kidney disease;  
 XX neovascular condition of the retina; ss.

OS Homo sapiens.

PN WO200078341-A1.

PD 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

XX Wright CU, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.

PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 UV (ultra-violet) treatment (optional) and an antisenese nucleic acid that  
 inhibits or reduces growth factor mediated cell proliferation and/or  
 inflammation.

XX Example 7; Page 59; 201pp; English.

CC The present invention relates to a method for ameliorating the effects of  
 skin disorders. The method comprises contacting the skin with an  
 antisenese oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 inhibiting or reducing growth factor mediated cell proliferation,  
 inflammation and/or other disorders. The present sequence is an  
 oligonucleotide which can be used to design the antisenese  
 oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 F45161). The method is useful for ameliorating the effects of psoriasis,  
 ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 hyperneovascular condition such as a neovascular condition of the retina,  
 brain or skin, growth factor-mediated malignancies, other sclerotic  
 disease, kidney disease, hyperproliferation of the inside of blood  
 vessels or any other hyperplasia

XX Sequence 15 BP; 3 A; 1 C; 0 G; 11 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 938 TCTTCATTGGTTTAA 952

Do 1 TCTTTATTTTAA 15

RESULT 629

AAF53513

ID AAF53513 standard; DNA; 15 BP.

XX AAF53513;

XX 30-MAR-2001 (first entry)

XX IGF-I oligonucleotide #4473.

XX Antisenese therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytotatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;

KW neovascular condition of the retina; ss.

XX Homo sapiens.

PN WO200078341-A1.

PD 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

XX Wright CU, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.

PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 UV (ultra-violet) treatment (optional) and an antisenese nucleic acid that  
 inhibits or reduces growth factor mediated cell proliferation and/or  
 inflammation.

XX Example 8; Page 90; 201pp; English.

CC The present invention relates to a method for ameliorating the effects of  
 skin disorders. The method comprises contacting the skin with an  
 antisenese oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 inhibiting or reducing growth factor mediated cell proliferation,  
 inflammation and/or other disorders. The present sequence is an  
 oligonucleotide which can be used to design the antisenese  
 oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 F45161). The method is useful for ameliorating the effects of psoriasis,  
 ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 hyperneovascular condition such as a neovascular condition of the retina,  
 brain or skin, growth factor-mediated malignancies, other sclerotic  
 disease, kidney disease, hyperproliferation of the inside of blood  
 vessels or any other hyperplasia

XX Sequence 15 BP; 0 A; 8 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 925 CTTTATCCCTCTC 939

Db 1 CTTTCTCTCTCTC 15

RESULT 630

AAF49077/c

ID AAF49077 standard; DNA; 15 BP.

XX AAF49077;

XX 30-MAR-2001 (first entry)

XX IGF-I oligonucleotide #37.

XX Antisenese therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytotatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.

XX Homo sapiens.





PA (MURD-) MURDOCH CHILDRENS RES INST.  
 XX  
 PI Wright CJ, Werther GA, Edmondson SR;  
 XX  
 DR WPI; 2001-041421/05.  
 XX  
 XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 PT inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.  
 XX  
 XX Example 8; Page 75; 201pp; English.  
 PS  
 XX  
 XX The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, pityriasis, ruba, pilaris, seborrheoa, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,  
 CC brain or skin, growth factor-mediated malignancies, other sclerotic  
 CC disease, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia  
 XX  
 SQ Sequence 15 BP; 7 A; 1 C; 7 G; 0 T; 0 U; 0 Other;  
  
 Query Match 14.0%; Score 10.2; DB 1; Length 15;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
 QY 931 TCCTCTCTCTCTCTCT 945  
 DB |||||  
 15 TCCTCTCTCTCTCTCT 1  
  
 RESULT 633  
 ABX04014/c  
 ID ABX04014 standard; DNA; 15 BP.  
 XX  
 AC ABX04014;  
 XX  
 XX 09-JAN-2003 (first entry)  
 XX  
 DE Resistance gene ermTR DNA fragment.  
 XX  
 KW Detection; probe; diagnosis; oral disease; paradontitis; caries; therapy;  
 KW polymorphism; virulence factor; antibiotic resistance gene; prognosis;  
 KW oral infection; detection; pathogen; coronary heart disease;  
 KW diabetic symptom; ss.  
 XX  
 OS Unidentified.  
 XX  
 XX DE20110013-U1.  
 XX  
 XX 18-OCT-2001.  
 XX  
 XX 13-MAR-2001; 2001DE-02010013.  
 XX  
 XX 13-MAR-2001; 2001DE-01012348.  
 XX  
 XX 13-MAR-2001; 2001DE-02010013.  
 XX  
 XX (ROET/) ROETGER A.  
 XX  
 XX WPI; 2001-657777/76.  
 XX  
 XX Oligonucleotide array, useful for diagnosing oral diseases, particularly  
 PT paradontitis, carries human or microbial reference sequences.  
 XX

PS Claim 10; Page 29; 58pp; German.  
 XX  
 CC This invention describes a novel nucleotide carrier with probes used for  
 CC diagnosis of oral diseases, particularly paradontitis, but also caries,  
 CC especially to identify genetic predisposition (as indicated by  
 CC polymorphisms) to disease and to identify causative microorganisms or  
 CC their associated virulence factors and antibiotic resistance genes, e.g.  
 CC for selection of therapy and for prognosis. They are also useful for  
 CC research into oral infections. The carriers allow simultaneous detection  
 CC of both host and pathogen parameters, providing quickly and simply an  
 CC individual's paradontitis profile, including detection of pathogens that  
 CC are associated with increased risk of coronary heart diseases and/or  
 CC aggravation of diabetic symptoms, and of opportunistic pathogens.  
 CC ABX03870-ABX04044 represent DNA fragments used to illustrate the method  
 CC of the invention  
 XX  
 SQ Sequence 15 BP; 6 A; 3 C; 2 G; 4 T; 0 U; 0 Other;  
  
 Query Match 14.0%; Score 10.2; DB 1; Length 15;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
 QY 941 TCATTGGTTTAAATGT 955  
 DB |||||  
 15 TCCTTGGTAAATGT 1  
  
 RESULT 634  
 ABK23841/c  
 ID ABK23841 standard; DNA; 15 BP.  
 XX  
 AC ABK23841;  
 XX  
 XX 09-APR-2002 (first entry)  
 XX  
 DE E. coli OmpA strong ribosome binding site.  
 XX  
 KW Vaccine; molecular scaffold; pilus; pilin; HBCAg; antigen;  
 KW hepatitis B virus capsid protein; JUN; FOS; HIV gp140;  
 KW measles virus N protein; bee venom phospholipase; Th type 2 T-helper;  
 KW Th2; Sinbis virus E2 protein; amyloid beta; influenza M2 antigen;  
 KW human immunodeficiency virus infection; viral hepatitis; measles;  
 KW chicken pox; pneumonia; tuberculosis; syphilis; malaria; allergy; cancer;  
 KW chronic disease; arthritis; colitis; diabetes; multiple sclerosis; ss;  
 KW OmpA ribosome binding site.  
 XX  
 OS Escherichia coli.  
 XX  
 XX WO200185208-A2.  
 XX  
 XX 15-NOV-2001.  
 XX  
 XX 02-MAY-2001; 2001WO-IB000741.  
 XX  
 XX 05-MAY-2000; 2000US-0202341P.  
 XX  
 XX (CYTO-) CYTOS BIOTECHNOLOGY AG.  
 XX  
 XX (SEBH/) SEBBEL P.  
 XX  
 XX (DUNA/) DUNANT N.  
 XX  
 XX (BACH/) BACHMANN M.  
 XX  
 XX (TISS/) TISSOT A.  
 XX  
 XX (LECH/) LECHNER F.  
 XX  
 XX Sebbel P, Dunant N, Bachmann M, Tissot A, Lechener F;  
 XX  
 XX WPI; 2002-055561/07.  
 XX  
 XX New composition, useful for vaccine production, comprises antigen or  
 PT antigenic determinant and non-natural molecular scaffold comprising  
 PT organizer and core particle such as bacterial pilus or pilin protein.  
 XX  
 XX Example 6; Page 77; 287pp; English.  
 XX

The invention relates to a composition comprising: (a) a non-natural molecular scaffold (molecular scaffold) which comprises a core particle such as a bacterial pilus or pilin protein, a recombinant form of the protein, a virus-like particle or a hepatitis B virus capsid protein (HBcAg), and an antigen; and (b) an antigen or antigenic determinant, where the molecular scaffold and antigenic determinant interact to form an ordered and repetitive antigen array. Suitable antigenic determinants include JUN, FOS, HIV gp140, measles virus N protein, bee venom phospholipase, Sindbis virus E2 protein, amyloid beta derived peptide and influenza M2 antigen. The composition (or vaccine) is useful for immunisation, by administration to a subject, where the administration produces an immune response, such as humoral, cellular or protective immune response, preferably a Th type 2 T-helper (Th2) response that is specific for the antigenic determinant. The administration induces antibodies specific for the antigenic determinant of a subtype corresponding to the Th2 subtype in the subject. The subject does not generate a Th2 subtype that is specific for pilus or pilin polypeptide or antigenic determinant. The composition is useful for the production of vaccines for prevention of infectious diseases such as human immunodeficiency virus, viral hepatitis, measles, chicken pox, pneumonia, tuberculosis, syphilis, malaria, and for treating allergy, cancer, and chronic diseases induced or accelerated by a Th1 type immune response, such as arthritis, colitis, diabetes and multiple sclerosis. The composition is useful to generate defined self-specific antibodies and specific immune responses of the Th2 type and allows the creation of highly efficient vaccines against infectious diseases, and for treating allergy, cancer, and chronic diseases induced or accelerated by a Th1 type immune response. The present invention is an OmpA ribosome binding site incorporated into vectors expressing compositions of the invention

Sequence 15 BP; 8 A; 1 C; 5 G; 1 T; 0 U; 0 Other;  
Query Match 14.0%; Score 10.2; DB 1; Length 15;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
924 CCTTTTATCCCTCCT 938  
| | | | | | | | | |  
15 CGTTTTTACCTCCT 1

RESULT 635  
ABS70925/C  
ABS70925 standard; DNA; 15 BP.  
ABS70925;  
10-DEC-2002 (first entry)  
Molecular antigen array associated DNA sequence #13.  
Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;  
cytostatic; antiviral; antidiabetic; hypoglycaemic; antigen array;  
vaccine; infectious disease; ds.  
Unidentified.  
WO200256905-A2.  
25-JUL-2002.  
21-JAN-2002; 2002WO-IB000166.  
19-JAN-2001; 2001US-0262379P.  
04-MAY-2001; 2001US-0288549P.  
05-OCT-2001; 2001US-0326998P.  
07-NOV-2001; 2001US-0331045P.  
(CYTO-) CYTOS BIOTECHNOLOGY AG.  
Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;  
Piossek C;

WPI; 2002-627351/67.  
Molecular antigen array used in the production of vaccines for infectious diseases.  
Disclosure; Page 311; 441pp; English.  
This invention relates to a novel ordered and repetitive antigen array used in the production of vaccines for infectious diseases. The invention also discloses a composition comprising a non-natural molecular scaffold comprising a core particle selected from a core particle of a non-natural origin and a core particle of natural origin and an antigenic determinant at least one first attachment site, where the antigenic determinant is connected to the core particle by at least one covalent bond. Also disclosed is an antigen or antigenic determinant with at least one second attachment site, where the antigen or antigenic determinant is amyloid beta peptide (Abeta1-42) or its fragment and where the second attachment site is selected from an attachment site not naturally occurring with the antigen or antigenic determinant and an attachment site naturally occurring with the antigen or antigenic determinant, where the second attachment site is capable of association through at least one non-peptide bond to the first attachment site and where the antigen or antigenic determinant and the scaffold interact through the association to form an ordered and repetitive antigen array. The invention also comprises a coat protein capable of forming a capsid which comprises mutant Qbeta coat proteins having an amino acid sequence selected from five amino acid sequences fully defined in the specification. The compounds of the invention may have antimicrobial, antiallergic, immunomodulatory, cytostatic, antiviral, antidiabetic, or hypoglycaemic activities and may be used in immunisation and as a vaccine. The present sequence represents a DNA sequence used to create the compositions of the invention  
Sequence 15 BP; 8 A; 1 C; 5 G; 1 T; 0 U; 0 Other;  
Query Match 14.0%; Score 10.2; DB 1; Length 15;  
Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
924 CCTTTTATCCCTCCT 938  
| | | | | | | | | |  
15 CGTTTTTACCTCCT 1  
RESULT 636  
ABL59135  
ABL59135 standard; DNA; 15 BP.  
ABL59135;  
07-AUG-2003 (revised)  
07-OCT-2002 (first entry)  
PCR primer A-Au for a fragment of the LTR of ALSV.  
Long terminal repeat; LTR; ALSV; lung cancer; ALSV-induced cancer; PCR primer; ss.  
Avian leukosis virus.  
US6391555-B1.  
21-MAY-2002.  
07-JAN-2000; 2000US-00479770.  
07-JAN-1999; 99US-0115087P.  
(JOHN/) JOHNSON E S.  
Johnson ES;  
WPI; 2002-478534/51.  
XX

PT Detecting avian leucosis/sarcoma virus (ALSV) nucleic acids, particularly  
 PT long terminal repeats, in a DNA sample from a patient indicates that the  
 PT patient has, or is likely to develop ALSV-induced lung cancer.

PS Claim 20; Col 9; 25pp; English.

XX PCR primers ABL59134-35 were used to amplify a fragment from a conserved  
 CC region of the long terminal repeat (LTR) of avian leucosis/sarcoma virus  
 CC (ALSV). The primers were used to screen for an increased potential for  
 CC developing ALSV-induced lung cancer. The method comprises detecting ALSV  
 CC nucleic acid sequences in DNA from a sample from the patient. The method  
 CC is useful for the detection of ALSV-induced cancer. (Updated on 07-AUG-  
 CC 2003 to correct OS field.)

XX Sequence 15 BP; 2 A; 6 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 930 ATCCCTCCTCTTCAT 944  
 Db 1 AGCCTTCGCTTCAT 15

RESULT 637

ABL59137  
 ID ABL59137 standard; DNA; 15 BP.

AC ABL59137;

DT 07-AUG-2003 (revised)

DT 07-OCT-2002 (first entry)

DE PCR primer A-Auj for a fragment of the LTR of ALSV.

DE Long terminal repeat; LTR; ALSV; lung cancer; ALSV-induced cancer; PCR;  
 KW primer; ss.

OS Avian leukosis virus.

OS US6391555-B1.

PD 21-MAY-2002.

PP 07-JAN-2000; 2000US-00479770.

PP 07-JAN-1999; 99US-0115087P.

PP (JOHN/) JOHNSON E S.

PI Johnson ES;

PI WPI; 2002-478534/51.

PT Detecting avian leucosis/sarcoma virus (ALSV) nucleic acids, particularly  
 PT long terminal repeats, in a DNA sample from a patient indicates that the  
 PT patient has, or is likely to develop ALSV-induced lung cancer.

PS Claim 20; Col 9; 25pp; English.

XX PCR primers ABL59136-37 were used to amplify a fragment from a conserved  
 CC region of the long terminal repeat (LTR) of avian leucosis/sarcoma virus  
 CC (ALSV). The primers were used to screen for an increased potential for  
 CC developing ALSV-induced lung cancer. The method comprises detecting ALSV  
 CC nucleic acid sequences in DNA from a sample from the patient. The method  
 CC is useful for the detection of ALSV-induced cancer. (Updated on 07-AUG-  
 CC 2003 to correct OS field.)

XX Sequence 15 BP; 3 A; 6 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 930 ATCCCTCCTCTTCAT 944  
 Db 1 AGCCTTCGCTTCAT 15

RESULT 638

ABS66351/C

ID ABS66351 standard; DNA; 15 BP.

AC ABS66351;

DT 29-NOV-2002 (first entry)

DE Molecular antigen array related modified ribosome binding site.

DE Molecular antigen array; vaccine; ss; primer; antimicrobial;

DE molecular scaffold; amyloid beta; Abeta 1-42; influenza;

DE graft versus host disease; IGE-mediated allergic reaction; anaphylaxis;

DE adult respiratory distress syndrome; ARDS; Crohn's disease;

DE allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;

DE Grave's disease; systemic lupus erythematosus; osteoporosis;

DE inflammatory immune disease; myasthenia gravis; multiple sclerosis;

DE immunoproliferative disease lymphadenopathy; Alzheimer's disease;

DE angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;

DE rheumatoid arthritis; diabetes; infectious disease.

OS Unidentified.

OS WO200256907-A2.

PD 25-JUL-2002.

PP 21-JAN-2002; 2002WO-1B000168.

PP 19-JAN-2001; 2001US-0262379P.

PP 04-MAY-2001; 2001US-0288549P.

PP 05-OCT-2001; 2001US-032698P.

PP 07-NOV-2001; 2001US-0331045P.

PP (CYTO-) CYTOS BIOTECHNOLOGY AG.

PP (NOVS) NOVARTIS PHARMA AG.

PP (MAUR/) MAURER P.

PP (LECH/) LECHNER F.

PP (ORTM/) ORTMANN R.

PP (LUEO/) LUEOEND R.

PP (STAU/) STAUFENBIEL M.

PP (FREY/) FREY P.

PI Maurer P, Lechner F, Ortmann R, Lueoend R, Staufenbiel M, Frey P;

PI Renner WA, Bachmann M, Tissot A, Sebbel P, Piossek C;

PI WPI; 2002-636514/68.

PT Molecular antigen array used in the production of vaccines for infectious

PT diseases.

PS Disclosure; Page 289; 418pp; English.

XX The invention relates to a composition comprising: (a) a non-natural  
 CC molecular scaffold comprising: (i) a core particle selected from: (1) a  
 CC core particle of a non-natural origin; and (2) a core particle of natural  
 CC origin; and (ii) an organiser comprising at least one first attachment  
 CC site, where the organiser is connected to the core particle by at least  
 CC one covalent bond; (b) an antigen or antigenic determinant with at least  
 CC one second attachment site, where the antigen or antigenic determinant is  
 CC amyloid beta peptide (Abeta 1-42) or its fragment, and where the second  
 CC attachment site is selected from: (i) an attachment site not naturally  
 CC occurring with the antigen or antigenic determinant; and (ii) an  
 CC attachment site naturally occurring with the antigen or antigenic  
 CC determinant, where the second attachment site is capable of association  
 CC through at least one non-peptide bond to the first attachment site; and

Mon Oct 18 14:40:13 2004

where the antigen or antigenic determinant and the scaffold interact through the association to form an ordered and repetitive antigen array. Also included is a process for producing a non-naturally occurring ordered and repetitive antigen array. The composition is used in immunisation and as a vaccine for diseases such as influenza, graft versus host disease, IgE-mediated allergic reactions, anaphylaxis, adult respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma, acute lymphoblastic leukaemia, inflammatory immune diseases, myasthenia gravis, immunoproliferative disease lymphadenopathy, angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy, rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease, osteoporosis and infectious diseases. The present sequence is a Molecular antigen array related DNA sequence which is included in the sequence listing but is not mentioned anywhere else in the specification

Sequence 15 BP; 8 A; 1 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;  
Best Local Similarity 80.0%; Pred. NO. 1.1e+03;  
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

924 CCTTTATCCTCCT 938

15 CGTTTTTACCTCCT 1

SULT 639

ABL42623 standard; DNA; 15 BP.

ABL42623;

11-APR-2002 (first entry)

Hairpin beacon target hybridisation oligonucleotide #2.

Hybridisation; thermodynamic; computer readable storage medium; probe; target; molecular beacon; duplex; hairpin; ss.

Synthetic.

WO200194611-A2.

13-DEC-2001.

07-JUN-2001; 2001WO-US018424.

07-JUN-2000; 2000US-0209778P.

(UYWA-) UNIV WAYNE STATE.

Santalucia J, Peyret N;

WPI; 2002-122125/16.

Predicting nucleic acid hybridization thermodynamics based on hybridization information, thermodynamic parameter, correction data and first set of data which represents hybridization conditions.

Disclosure; Fig 8; 100pp; English.

The present invention describes a method for predicting nucleic acid hybridisation thermodynamics (HT) comprising providing a database of thermodynamic parameters (TP), receiving hybridisation information which represents a sequence, receiving correction data, and a first set of data which represents hybridisation conditions, and calculating HT including net HT based on the hybridisation information, TP, the correction data and the first set of data. Also described are: (1) a computer-readable storage medium having stored in it, a database of TP and a computer program which executes the above method; and (2) a system for predicting nucleic acid HT, comprising a database of TP, units for receiving hybridisation information which represents at least one sequence and for

receiving correction data, receiving a first set of data which represents hybridisation conditions and unit for calculating HT. The method and system are useful to optimise and predict probe-target hybridisation. The method and system takes into account of single strand folding thermodynamics to calculate effective hybridisation thermodynamics not taken into account by prior art methods. ABL42498 to ABL42626 represent oligonucleotide sequences which are used in the exemplification of the present invention

Sequence 15 BP; 0 A; 0 C; 4 G; 11 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;  
Best Local Similarity 80.0%; Pred. NO. 1.1e+03;  
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 903 GGTCATTTTCTTGG 917

DB 1 GGTTTTTTTTTTGG 15

RESULT 640

ABL42606 standard; DNA; 15 BP.

AC ABL42606;

11-APR-2002 (first entry)

Duplex sequence module 1 oligonucleotide #2.

Hybridisation; thermodynamic; computer readable storage medium; probe; target; molecular beacon; duplex; hairpin; ss.

Synthetic.

WO200194611-A2.

13-DEC-2001.

07-JUN-2001; 2001WO-US018424.

07-JUN-2000; 2000US-0209778P.

(UYWA-) UNIV WAYNE STATE.

Santalucia J, Peyret N;

WPI; 2002-122125/16.

Predicting nucleic acid hybridization thermodynamics based on hybridization information, thermodynamic parameter, correction data and first set of data which represents hybridization conditions.

Disclosure; Fig 2a; 100pp; English.

The present invention describes a method for predicting nucleic acid hybridisation thermodynamics (HT) comprising providing a database of thermodynamic parameters (TP), receiving hybridisation information which represents a sequence, receiving correction data, and a first set of data which represents hybridisation conditions, and calculating HT including net HT based on the hybridisation information, TP, the correction data and the first set of data. Also described are: (1) a computer-readable storage medium having stored in it, a database of TP and a computer program which executes the above method; and (2) a system for predicting nucleic acid HT, comprising a database of TP, units for receiving hybridisation information which represents at least one sequence and for receiving correction data, receiving a first set of data which represents hybridisation conditions and unit for calculating HT. The method and system are useful to optimise and predict probe-target hybridisation. The thermodynamics to calculate effective hybridisation thermodynamics not taken into account by prior art methods. ABL42498 to ABL42626 represent oligonucleotide sequences which are used in the exemplification of the

CC present invention  
 XX Sequence 15 BP; 0 A; 0 C; 4 G; 11 T; 0 U; 0 Other;  
 SQ Query Match 14.0%; Score 10.2; DB 1; Length 15;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 903 GGTCAATTTCTTTGG 917  
 DB 1 GGTCTTTTCTTTGG 15

RESULT 641  
 ID ABA91820/c  
 XX ABA91820 standard; DNA; 15 BP.  
 AC ABA91820;  
 XX  
 DT 15-MAY-2002 (first entry)  
 DE Escherichia coli ompA gene ribosome binding site.  
 XX  
 KW Ribosome binding site; PBS; ompA gene; IgE; immunoglobulin E; allergy;  
 KW asthma; eczema; urticaria; anaphylactic shock; allergic rhinitis;  
 KW conjunctivitis; anti-anaphylactic; immunosuppressive; antiallergic;  
 KW anasthmatic; anti-inflammatory; dermatological; vasotropic;  
 KW ophthalmological; vaccine; therapy; ds.  
 XX  
 CS Escherichia coli.  
 XX  
 EN WO200209751-A2.  
 XX  
 PD 07-FEB-2002.  
 XX  
 PF 27-JUL-2001; 2001WO-IB001353.  
 XX  
 PR 28-JUL-2000; 2000US-0221841P.  
 XX  
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.  
 PA (BACH/) BACHMANN M F.  
 PA (RENN/) RENNER W A.  
 XX  
 PI Bachmann MF, Renner WA;  
 XX  
 DR WPI; 2002-227076/28.  
 XX  
 PT Composition for treating immunoglobulin (Ig) E-mediated disorder such as  
 PT anaphylactic shock, allergic rhinitis and conjunctivitis, comprises a  
 PT polypeptide that includes CH1 and/or CH4 domains of IgE molecule coupled  
 PT to a carrier.  
 XX  
 PS Example; Page 38; 71pp; English.  
 XX  
 CC The present sequence is that of the strong ribosome binding site and 5'  
 CC untranslated region of the Escherichia coli ompA gene. The sequence was  
 CC used in a pAV vector series (see ABA91821-25) for expression of FOS  
 CC fusion proteins in E. coli. The invention is based on the discovery that  
 CC a polypeptide that includes the CH1 and/or CH4 domain(s) of an IgE  
 CC molecule (see AAM50940), coupled to a carrier (e.g. FOS), can be used to  
 CC induce self-specific anti-IgE antibodies in a mammal that reduce or  
 CC eliminate the pool of free IgE in the mammal's serum. Claimed  
 CC compositions comprising a carrier joined to the IgE derived polypeptide,  
 CC or a polynucleotide encoding the fusion protein, are used to inhibit or  
 CC prevent IgE-mediated disorders such as anaphylactic shock, allergic  
 CC rhinitis or conjunctivitis, an allergic reaction to an allergen such as  
 CC fur, dust or food, an asthmatic reaction, eczema or urticaria (all  
 CC claimed)

QY 908 TTTTCTTTCTTTGGTCTTT 922  
 DB 1 TTTTCTTTCTTTCTTT 15

Query Match 14.0%; Score 10.2; DB 1; Length 15;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 924 CCTTTATCCTCTCT 938  
 DB 15 CGTTTCTTACTCTCT 1

RESULT 642  
 ID AAS95955  
 XX AAS95955 standard; DNA; 15 BP.  
 AC AAS95955;  
 XX  
 DT 26-FEB-2002 (first entry)  
 DE Human CALM1 gene allele-specific oligonucleotide #64.  
 XX  
 KW Calmodulin 1; CALM1; human; single nucleotide polymorphism; SNP;  
 KW haplotyping; SCYA3; Alzheimer's disease; drug screening;  
 KW calcium-dependent signal transduction; PCR primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200179218-A2.  
 XX  
 PD 25-OCT-2001.  
 XX  
 PF 09-APR-2001; 2001WO-US011509.  
 XX  
 PR 12-APR-2000; 2000US-0196340P.  
 XX  
 PA (GENA-) GENAISSANCE PHARM INC.  
 XX  
 PI Bentivegna SC, Chew A, Choi JY, Koshy B, Stephens JC;  
 XX  
 DR WPI; 2002-049190/06.  
 XX  
 PT New calmodulin-1 (CALM-1) isogene polymorphic variants, useful in  
 PT expressing CALM1 protein for use in screening for candidate drugs to  
 PT treat diseases related to CALM1 activity such as Alzheimer's disease.  
 XX  
 PS Claim 15; Page 13; 82pp; English.  
 XX  
 CC The invention relates to an isolated polynucleotide comprising a sequence  
 CC selected from a polymorphic variant of calmodulin 1 (CALM1). The  
 CC polymorphic variant comprises an CALM1 isogene defined by a haplotype  
 CC selected from haplotypes 1-21 given in the specification. The  
 CC polymorphisms are useful for studying the biological function of CALM1 as  
 CC well as in identifying drugs targeting this protein for the treatment of  
 CC a disorder related to its abnormal expression or function. The  
 CC polymorphic variants may also be used in screening for compounds  
 CC targeting CALM1 to treat a specific condition or disease predicted to be  
 CC associated with CALM1 activity. Establishing CALM1 haplotype or haplotype  
 CC pair of an individual is useful for improving the efficiency and  
 CC reliability of several steps in the discovery and development of drugs  
 CC for treating diseases associated with SCYA3 activity, e.g. Alzheimer's  
 CC disease and diseases involving defects in calcium-dependent signal  
 CC transduction. Haplotyping the CALM1 gene in an individual is also useful  
 CC in the design of clinical trials of candidate drugs for treating a  
 CC specific condition or disease predicted to be associated with CALM1  
 CC activity. AAS95892-AAS96018 represent human CALM1 allele-specific  
 CC oligonucleotides and PCR primers of the invention

QY 908 TTTTCTTTCTTTGGTCTTT 922  
 DB 1 TTTTCTTTCTTTCTTT 15

Query Match 14.0%; Score 10.2; DB 1; Length 15;  
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;  
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

X  
C  
ACD56201:



CC preferentially or differentially expressed in dendritic cells, while  
CC other transcripts correspond to novel genes. Antigen-presenting cell  
CC (APC)-associated costimulatory factors play an important role in the  
CC activation of the cytotoxic immune response, particularly against tumour  
CC cells. Tumour antigen presentation via the MHC (major histocompatibility  
CC complex) and subsequent recognition by T-cell receptors is alone  
CC insufficient to activate a robust cytotoxic immune response that can lyse  
CC the tumour cells, immunostimulatory cofactors also being required for  
CC efficient activation of cytotoxic T-lymphocytes (CTLs). Nucleic acid  
CC sequences identified using the SAGE tags have several potential uses.  
CC They may be used in vaccines to induce an immune response, particularly  
CC against a tumour antigen; to modulate the genotype of an APC; to screen  
CC for agents that modulate expression of differentially expressed genes in  
CC an APC; and as hybridisation probes/amplification primers for the  
CC diagnosis, prognosis and monitoring of diseases related to abnormal  
CC expression of these genes. Detection of the dendritic cell differentially  
CC expressed genes, or of their encoded proteins, can be used to identify  
CC cells as belonging to the monocyte lineage. Cells containing these genes  
CC can be used in active immunotherapy (or to stimulate production of a  
CC population of antigen-specific effector cells) and vectors containing  
CC APC-associated costimulatory factors ensure adequate antigen  
CC presentation to endogenous APCs and upregulates the APCs for the  
CC presentation of co-stimulatory signals, migration to T cell-rich sites,  
CC secretion of T cell growth factors and secretion of chemokines for  
CC recruitment of immune effector cells  
XX  
SQ Sequence 10 BP; 4 A; 0 C; 5 G; 1 T; 0 U; 0 Other;  
  
Query Match 13.7%; Score 10; DB 1; Length 10;  
Best Local Similarity 100.0%; Pred. No. 8.9e+02;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 929 TATCCCTCTCT 938  
Db 10 TATCCCTCTCT 1  
  
RESULT 648  
AAZ79599/c  
ID AAZ79599 standard; DNA; 10 BP.  
XX AAZ79599;  
AC AAZ79599;  
XX 10-APR-2000 (first entry)  
XX Human dendritic cell SAGE tag, SEQ ID NO:2027.  
XX  
XX SAGE tag; serial analysis of gene expression; antigen-presenting cell;  
KW APC; monocyte-derived dendritic cell; differential gene expression;  
KW immunostimulatory cofactor; costimulatory factor; CTL;  
KW cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.  
XX Homo sapiens.  
XX  
XX WO9965924-A2.  
XX 23-DEC-1999.  
XX  
XX 18-JUN-1999; 99WO-US013800.  
XX  
XX 19-JUN-1998; 98US-0089833P.  
PR 19-JUN-1998; 98US-0089844P.  
PR 19-JUN-1998; 98US-0089853P.  
PR 19-JUN-1998; 98US-0089878P.  
PR 19-JUN-1998; 98US-0089911P.  
PR 19-JUN-1998; 98US-0089922P.  
PR 19-JUN-1998; 98US-0089933P.  
PR 19-JUN-1998; 98US-0089944P.  
PR 19-JUN-1998; 98US-0089955P.  
PR 19-JUN-1998; 98US-0089966P.  
PR 19-JUN-1998; 98US-0089977P.  
PR 19-JUN-1998; 98US-0090000P.  
PR 19-JUN-1998; 98US-0090035P.  
PR 19-JUN-1998; 98US-0090045P.  
PR 19-JUN-1998; 98US-0090079P.  
PR 19-JUN-1998; 98US-0090080P.  
PR 08-DEC-1998; 98US-0111715P.  
  
(GENZ ) GENZYME CORP.  
(ROBE/) ROBERTS B.L.  
(SHAN/) SHANKARA S.  
  
Roberts BL, Shankara S;  
WPI; 2000-106077/09.  
  
I Isolated polynucleotides differentially expressed in antigen-presenting  
I cells, useful in gene vaccines against cancer.  
  
X Claim 1; Page 94; 130pp; English.  
  
X Sequences AAZ77573-279709 represent SAGE (serial analysis of gene  
X expression) tags used to identify mRNA transcripts encoding  
X immunostimulatory cofactor proteins which are preferentially or  
X differentially expressed in monocyte-derived dendritic cells compared  
X with monocytes. Some of the transcripts correspond to known genes or ESTs  
X (expressed sequence tags) which were previously unknown to be

SULT 647  
278610/c  
AAZ78610 standard; DNA; 10 BP.  
AAZ78610;  
  
10-APR-2000 (first entry)  
Human dendritic cell SAGE tag, SEQ ID NO:1038.  
  
SAGE tag; serial analysis of gene expression; antigen-presenting cell;  
APC; monocyte-derived dendritic cell; differential gene expression;  
immunostimulatory cofactor; costimulatory factor; CTL;  
cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.  
  
Homo sapiens.  
WO9965924-A2.  
23-DEC-1999.  
18-JUN-1999; 99WO-US013800.  
19-JUN-1998; 98US-0089833P.  
19-JUN-1998; 98US-0089844P.  
19-JUN-1998; 98US-0089853P.  
19-JUN-1998; 98US-0089878P.  
19-JUN-1998; 98US-0089911P.  
19-JUN-1998; 98US-0089922P.  
19-JUN-1998; 98US-0089933P.  
19-JUN-1998; 98US-0089944P.  
19-JUN-1998; 98US-0089977P.  
19-JUN-1998; 98US-0089999P.  
19-JUN-1998; 98US-0090000P.  
19-JUN-1998; 98US-0090035P.  
19-JUN-1998; 98US-0090036P.  
19-JUN-1998; 98US-0090039P.  
19-JUN-1998; 98US-0090040P.  
19-JUN-1998; 98US-0090041P.  
19-JUN-1998; 98US-0090042P.  
19-JUN-1998; 98US-0090043P.  
19-JUN-1998; 98US-0090044P.  
19-JUN-1998; 98US-0090045P.  
19-JUN-1998; 98US-0090047P.  
19-JUN-1998; 98US-0090048P.  
19-JUN-1998; 98US-0090072P.  
19-JUN-1998; 98US-0090076P.  
19-JUN-1998; 98US-0090077P.  
19-JUN-1998; 98US-0090078P.  
19-JUN-1998; 98US-0090079P.  
19-JUN-1998; 98US-0090080P.  
08-DEC-1998; 98US-0111715P.  
  
(GENZ ) GENZYME CORP.  
(ROBE/) ROBERTS B.L.  
(SHAN/) SHANKARA S.  
  
Roberts BL, Shankara S;  
WPI; 2000-106077/09.  
  
I Isolated polynucleotides differentially expressed in antigen-presenting  
I cells, useful in gene vaccines against cancer.  
  
X Claim 1; Page 94; 130pp; English.  
  
X Sequences AAZ77573-279709 represent SAGE (serial analysis of gene  
X expression) tags used to identify mRNA transcripts encoding  
X immunostimulatory cofactor proteins which are preferentially or  
X differentially expressed in monocyte-derived dendritic cells compared  
X with monocytes. Some of the transcripts correspond to known genes or ESTs  
X (expressed sequence tags) which were previously unknown to be



PR 19-JUN-1998; 98US-0090036P.  
PR 19-JUN-1998; 98US-0090039P.  
PR 19-JUN-1998; 98US-0090040P.  
PR 19-JUN-1998; 98US-0090041P.  
PR 19-JUN-1998; 98US-0090042P.  
PR 19-JUN-1998; 98US-0090043P.  
PR 19-JUN-1998; 98US-0090044P.  
PR 19-JUN-1998; 98US-0090045P.  
PR 19-JUN-1998; 98US-0090047P.  
PR 19-JUN-1998; 98US-0090048P.  
PR 19-JUN-1998; 98US-0090072P.  
PR 19-JUN-1998; 98US-0090076P.  
PR 19-JUN-1998; 98US-0090077P.  
PR 19-JUN-1998; 98US-0090078P.  
PR 19-JUN-1998; 98US-0090079P.  
PR 19-JUN-1998; 98US-0090080P.  
PR 08-DEC-1998; 98US-0111715P.  
XX (GENZ ) GENZYME CORP.  
PA (ROBE//) ROBERTS B L.  
PA (SHAN//) SHANKARA S.

Roberts BL, Shankara S;

WPI; 2000-106077/09.

Isolated polynucleotides differentially expressed in antigen-presenting cells, useful in gene vaccines against cancer.

Claim 1; Page 122; 130pp; English.

Sequences AAZ77573-279709 represent SAGE (serial analysis of gene expression) tags used to identify mRNA transcripts encoding immunostimulatory cofactor proteins which are preferentially or differentially expressed in monocyte-derived dendritic cells compared with monocytes. Some of the transcripts correspond to known genes or ESTs (expressed sequence tags) which were previously unknown to be preferentially or differentially expressed in dendritic cells, while other transcripts correspond to novel genes. Antigen-presenting cell (APC)-associated costimulatory factors play an important role in the activation of the cytotoxic immune response, particularly against tumour cells. Tumour antigen presentation via the MHC (major histocompatibility complex) and subsequent recognition by T-cell receptors is alone insufficient to activate a robust cytotoxic immune response that can lyse the tumour cells, immunostimulatory cofactors also being required for efficient activation of cytotoxic T-lymphocytes (CTLs). Nucleic acid sequences identified using the SAGE tags have several potential uses. They may be used in vaccines to induce an immune response, particularly against a tumour antigen; to modulate the genotype of an APC; to screen for agents that modulate expression of differentially expressed genes in an APC; and as hybridisation probes/amplification primers for the diagnosis, prognosis and monitoring of diseases related to abnormal expression of these genes. Detection of the dendritic cell differentially expressed genes, or of their encoded proteins, can be used to identify cells as belonging to the monocyte lineage. Cells containing these genes can be used in active immunotherapy (or to stimulate production of a population of antigen-specific effector cells) and vectors containing them are used in gene therapy. Co-administration of tumour antigens and APC-associated costimulatory factors ensures adequate antigen presentation to endogenous APCs and upregulates the APCs for the presentation of co-stimulatory signals, migration to T cell-rich sites, secretion of T cell growth factors and secretion of chemokines for recruitment of immune effector cells

Sequence 10 BP; 6 A; 1 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 10;  
Best Local Similarity 100.0%; Pred. No. 8.9e+02;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 918 TCTTTGCCCT 927

DB 10 TCTTTGCCCT 1

RESULT 649  
AAZ78434/c  
ID AAZ78434 standard; DNA; 10 BP.  
XX  
XX AAZ78434;  
AC AAZ78434;  
XX  
DT 10-APR-2000 (first entry)  
XX  
DE Human dendritic cell SAGE tag, SEQ ID NO:862.  
XX  
XX SAGE tag; serial analysis of gene expression; antigen-presenting cell;  
KW APC; monocyte-derived dendritic cell; differential gene expression;  
KW immunostimulatory cofactor; costimulatory factor; CTL;  
KW cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO965924-A2.  
PN  
XX  
XX 23-DEC-1999.  
PD  
XX  
XX 18-JUN-1999; 99WO-US013800.  
PF  
XX  
XX 19-JUN-1998; 98US-0089833P.  
PR 19-JUN-1998; 98US-0089844P.  
PR 19-JUN-1998; 98US-0089853P.  
PR 19-JUN-1998; 98US-0089878P.  
PR 19-JUN-1998; 98US-008991P.  
PR 19-JUN-1998; 98US-008992P.  
PR 19-JUN-1998; 98US-008993P.  
PR 19-JUN-1998; 98US-008994P.  
PR 19-JUN-1998; 98US-008997P.  
PR 19-JUN-1998; 98US-008999P.  
PR 19-JUN-1998; 98US-009000P.  
PR 19-JUN-1998; 98US-0090035P.  
PR 19-JUN-1998; 98US-0090036P.  
PR 19-JUN-1998; 98US-0090039P.  
PR 19-JUN-1998; 98US-0090040P.  
PR 19-JUN-1998; 98US-0090041P.  
PR 19-JUN-1998; 98US-0090042P.  
PR 19-JUN-1998; 98US-0090043P.  
PR 19-JUN-1998; 98US-0090044P.  
PR 19-JUN-1998; 98US-0090045P.  
PR 19-JUN-1998; 98US-0090047P.  
PR 19-JUN-1998; 98US-0090048P.  
PR 19-JUN-1998; 98US-0090072P.  
PR 19-JUN-1998; 98US-0090076P.  
PR 19-JUN-1998; 98US-0090077P.  
PR 19-JUN-1998; 98US-0090078P.  
PR 19-JUN-1998; 98US-0090079P.  
PR 19-JUN-1998; 98US-0090080P.  
PR 08-DEC-1998; 98US-0111715P.  
XX (GENZ ) GENZYME CORP.  
PA (ROBE//) ROBERTS B L.  
PA (SHAN//) SHANKARA S.  
XX  
XX Roberts BL, Shankara S;  
PI  
XX  
XX WPI; 2000-106077/09.  
DR  
XX  
XX Isolated polynucleotides differentially expressed in antigen-presenting cells, useful in gene vaccines against cancer.  
PT  
XX  
XX Claim 1; Page 90; 130pp; English.  
PS  
XX  
XX Sequences AAZ77573-279709 represent SAGE (serial analysis of gene expression) tags used to identify mRNA transcripts encoding immunostimulatory cofactor proteins which are preferentially or differentially expressed in monocyte-derived dendritic cells compared with monocytes. Some of the transcripts correspond to known genes or ESTs with monocytes.

(expressed sequence tags) which were previously unknown to be preferentially or differentially expressed in dendritic cells, while other transcripts correspond to novel genes. Antigen-presenting cell (APC)-associated costimulatory factors play an important role in the activation of the cytotoxic immune response, particularly against tumour cells. Tumour antigen presentation via the MHC (major histocompatibility complex) and subsequent recognition by T-cell receptors is alone insufficient to activate a robust cytotoxic immune response that can lyse the tumour cells, immunostimulatory cofactors also being required for efficient activation of cytotoxic T-lymphocytes (CTLs). Nucleic acid sequences identified using the SAGE tags have several potential uses. They may be used in vaccines to induce an immune response, particularly against a tumour antigen; to modulate the immune response, particularly for agents that modulate expression of the genotype of an APC; to screen for agents that modulate expression of differentially expressed genes in an APC; and as hybridisation probes/amplification primers for the diagnosis, prognosis and monitoring of diseases related to abnormal expression of these genes. Detection of the dendritic cell differentially expressed genes, or of their encoded proteins, can be used to identify cells as belonging to the monocyte lineage. Cells containing these genes can be used in active immunotherapy (or to stimulate production of a population of antigen-specific effector cells) and vectors containing them are used in gene therapy. Co-administration of tumour antigens and APC-associated costimulatory factors ensures adequate antigen presentation to endogenous APCs and upregulates the APCs for the presentation of co-stimulatory signals, migration to T cell-rich sites, secretion of T cell growth factors and secretion of chemokines for recruitment of immune effector cells

Sequence 10 BP; 7 A; 2 C; 1 G; 0 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 8.9e+02;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

913 TTGTGCTTT 922  
 |||||  
 10 TTGTGCTTT 1

SUIT 650

Z84747

AAZ84747 standard; DNA; 10 BP.

AAZ84747;

07-APR-2000 (first entry)

Metastatic breast tumour cell downregulated transcript tag #3981.

Human; metastatic breast tumour tissue; breast cancer; tag; primer;  
 non-metastatic breast tumour tissue; gene therapy; anticancer;  
 antimetastatic; vaccine; diagnosis; ss.

Homo sapiens.

WO9965928-A2.

23-DEC-1999.

18-JUN-1999; 99WO-US013647.

19-JUN-1998; 98US-0089853P.

19-JUN-1998; 98US-0089997P.

19-JUN-1998; 98US-0090039P.

19-JUN-1998; 98US-0090040P.

19-JUN-1998; 98US-0090041P.

(GENZ ) GENZYME CORP.

(ROBE/) ROBERTS B L.

(SHAN/) SHANKARA S.

Roberts BL, Shankara S;

DR WPI; 2000-106079/09.

XX Isolated polynucleotides differentially expressed between metastatic and  
 PT non-metastatic breast cancer cells, useful for diagnosis, prevention and  
 PT treatment of cancer.

XX Claim 1; Page 164; 219pp; English.

XX AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts  
 CC that are preferentially transcribed in the metastatic breast tumour  
 CC tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942  
 CC to AAZ86677 represent tags corresponding to distinct transcripts that are  
 CC preferentially transcribed in the primary or non-metastatic breast tumour  
 CC tissue (i.e. are downregulated in metastatic breast tumour cells). These  
 CC transcripts can be used for diagnosis, prognosis, monitoring and  
 CC treatment of breast cancer, particularly where metastatic. Diagnosis is  
 CC by standard immunoassays or hybridisation/amplification reactions.  
 CC Compounds that modulate expression of the transcripts are potentially  
 CC useful for treatment of (metastatic) breast cancer, while promoters from  
 CC the transcripts are used to direct expression, in selected cell types, of  
 CC e.g. therapeutic genes (also ribozymes or antisense sequences),  
 CC particularly an antigen-encoding sequence for use in gene or cell-based  
 CC vaccines. Polypeptides encoded by the transcripts are also useful in  
 CC vaccines; for diagnosing breast cancer and for raising specific  
 CC antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic  
 CC agents. Host cells that produce the polypeptides or as therapeutic  
 CC and isolate populations of educated, antigen-specific immune effector  
 CC cells, e.g. cytotoxic T lymphocytes, and these used for adoptive  
 CC immunotherapy

XX Sequence 10 BP; 0 A; 1 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 8.9e+02;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 913 TTGTGCTTT 922

|||||  
 Db 1 TTGTGCTTT 10

RESULT 651

AAH63232

ID AAH63232 standard; cDNA; 10 BP.

XX AC AAH63232;

XX DT 20-SEP-2001 (first entry)

XX Human colon epithelium specific transcriptome sequence SEQ ID NO: 72.

DE Human; transcriptome; gene expression pattern; cancer; drug screening;  
 KW cancer diagnosis; cell specific gene expression; ss.

XX Homo sapiens.

XX WO200138577-A2.

XX PD 31-MAY-2001.

XX PF 21-NOV-2000; 2000WO-US031922.

XX PR 24-NOV-1999; 99US-00448480.

XX PA (UYJO ) UNIV JOHNS HOPKINS.

XX PI Velculescu VE, Vogelstein B, Kinzler KW;

XX WPI; 2001-367706/38.

XX New isolated polynucleotides, useful for identifying specific cell type,  
 PT such as cancer cell, comprises transcriptomes expressed in particular  
 PT cell types.

XX Claim 11; Page 40; 94pp; English.

XX The present invention describes a method of identifying the type of cell

XX in a sample, involving determining which of the sequences AAF63161-

XX AAH64724 is expressed by the cell. The transcriptomes described in the

XX invention are cell-type specific, cancer specific or ubiquitously

XX expressed in humans. They can also be used to screen for drugs, reduce

XX cancer specific gene expression, standardise expression and restore the

XX function of a diseased cell or tissue. The present sequence is one of the

XX transcriptomes described in the exemplification of the invention

SQ Sequence 10 BP; 1 A; 1 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 10;

Best Local Similarity 100.0%; Pred. No. 8.9e+02;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 941 TCATTGGTTT 950

Db 1 TCATTGGTTT 10

RESULT 652

AAF43800

ID AAF43800 standard; DNA; 10 BP.

AC AAF43800;

XX 23-MAR-2001 (first entry)

XX Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:11939.

XX Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;

XX nor previously assigned open reading frame; nonannotated ORF; SAGE;

XX serial analysis of gene expression; antifungal; tag; identification;

XX linker; PCR primer; ds.

XX Saccharomyces cerevisiae.

XX WO200077214-A2.

XX 21-DEC-2000.

XX 14-JUN-2000; 2000WO-US016223.

XX 16-JUN-1999; 99US-00335032.

XX (UYJO ) UNIV JOHNS HOPKINS.

XX Velulescu V, Vogelstein B, Kinzler K;

XX WPI; 2001-061874/07.

XX Yeast gene coding sequences comprising NORF genes with serial analysis of

XX gene expression (SAGE) tags, useful for studying, monitoring and

XX affecting phases of the cell cycle.

XX Example; Page 376; 419pp; English.

XX The present invention describes an isolated DNA molecule comprising a

XX coding sequence of a yeast gene selected from a group of 745 NORF (not

XX previously assigned open reading frame; or nonannotated ORF) genes

XX comprising a SAGE (serial analysis of gene expression) tag. Also

XX described are: (1) a method (M1) of using NORF genes to affect the cell

XX cycle comprising administering a NORF gene whose expression varies by at

XX least 10% between any two phases of the cell cycle selected from log

XX phase, S phase and G2/M; (2) a method (M2) for screening candidate

XX antifungal drugs comprising: (a) contacting a test substance with a yeast

XX cell; and (b) monitoring expression of a NORF gene whose expression

XX varies as in M1, where a test substance which modifies the expression of

XX the yeast gene is a candidate antifungal drug; (3) a method (M3) for

XX identifying human genes which are involved in cell cycle progression

CC comprising contacting human DNA with a probe which comprises at least 10

CC contiguous nucleotides of a NORF gene whose expression varies as in M1;

CC and (4) a method (M4) for identifying a candidate drug as a member of a

CC class of drugs having a characteristic effect on gene expression in a

CC yeast cell comprising contacting a yeast cell with a candidate drug and

CC monitoring expression in the yeast cell of at least 1 NORF gene whose

CC expression is affected by the class of drugs. The NORF genes may be used

CC to study, monitor and affect phases of the cell cycle, the differentially

CC expressed genes may be used as markers of phases of the cell cycle. The

CC methods may be used to identify candidate drugs which affect the cell

CC cycle and for identification of antifungal drugs. AAF33268 to AAF4064

CC represent SAGE tags used in the exemplification of the present invention.

CC AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE

CC method, in the exemplification of the present invention

XX Sequence 10 BP; 0 A; 1 C; 3 G; 6 T; 0 U; 0 Other;

SQ

Query Match 13.7%; Score 10; DB 1; Length 10;

Best Local Similarity 100.0%; Pred. No. 8.9e+02;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 914 TTGTCCTTTG 923

Db 1 TTGTCCTTTG 10

RESULT 653

AAF39218/c

ID AAF39218 standard; DNA; 10 BP.

AC AAF39218;

XX 23-MAR-2001 (first entry)

XX Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:5957.

XX Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;

XX nor previously assigned open reading frame; nonannotated ORF; SAGE;

XX serial analysis of gene expression; antifungal; tag; identification;

XX linker; PCR primer; ds.

XX Saccharomyces cerevisiae.

XX WO200077214-A2.

XX 21-DEC-2000.

XX 14-JUN-2000; 2000WO-US016223.

XX 16-JUN-1999; 99US-00335032.

XX (UYJO ) UNIV JOHNS HOPKINS.

XX Velulescu V, Vogelstein B, Kinzler K;

XX WPI; 2001-061874/07.

XX Yeast gene coding sequences comprising NORF genes with serial analysis of

XX gene expression (SAGE) tags, useful for studying, monitoring and

XX affecting phases of the cell cycle.

XX Example; Page 212; 419pp; English.

XX The present invention describes an isolated DNA molecule comprising a

XX coding sequence of a yeast gene selected from a group of 745 NORF (not

XX previously assigned open reading frame; or nonannotated ORF) genes

XX comprising a SAGE (serial analysis of gene expression) tag. Also

XX described are: (1) a method (M1) of using NORF genes to affect the cell

XX cycle comprising administering a NORF gene whose expression varies by at

XX least 10% between any two phases of the cell cycle selected from log

XX phase, S phase and G2/M; (2) a method (M2) for screening candidate

XX antifungal drugs comprising: (a) contacting a test substance with a yeast

XX cell; and (b) monitoring expression of a NORF gene whose expression

XX varies as in M1, where a test substance which modifies the expression of

XX the yeast gene is a candidate antifungal drug; (3) a method (M3) for

XX identifying human genes which are involved in cell cycle progression

varies as in M1, where a test substance which modifies the expression of the yeast gene is a candidate antifungal drug; (3) a method (M3) for identifying human genes which are involved in cell cycle progression comprising contacting human DNA with a probe which comprises at least 10 contiguous nucleotides of a NORF gene whose expression varies as in M1; and (4) a method (M4) for identifying a candidate drug as a member of a class of drugs having a characteristic effect on gene expression in a yeast cell comprising contacting a yeast cell with a candidate drug and monitoring expression in the yeast cell of at least 1 NORF gene whose expression is affected by the class of drugs. The NORF genes may be used to study, monitor and affect phases of the cell cycle, the differentially expressed genes may be used as markers of phases of the cell cycle. The methods may be used to identify candidate drugs which affect the cell cycle and for identification of antifungal drugs. AAF33268 to AAF44064 represent SAGE tags used in the exemplification of the present invention. AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE method, in the exemplification of the present invention

Sequence 10 BP; 7 A; 2 C; 1 G; 0 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 10;  
Best Local Similarity 100.0%; Pred. No. 8.9e+02;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Y 909 TTCTTTGGT 918  
| | | | |  
D 10 TTCTTTGGT 1

RESULT 654

AA595651/C

AAS95651 standard; DNA; 10 BP.

AAS95651;

14-FEB-2002 (first entry)

Human NPY1R gene allele-specific oligonucleotide PCR primer #6.

Human; neuropeptide Y receptor Y1; NPY1R; ss; antiarteriosclerotic; haplotyping; haplotype pair; single nucleotide polymorphism; genotyping; gene therapy; drug screening; cardiovascular disease; antidepressant; hypertension; cardiac; depression; probe; sequencing primer; PCR primer; PCR primer universal tail.

Homo sapiens.

WO200185742-A2.

15-NOV-2001.

07-MAY-2001; 2001WO-US014773.

05-MAY-2000; 2000US-0201950P.

(GENA-) GENAISSANCE PHARM INC.

Choi JY, Kliem SE, Koshiy B, Lee HH;

WPI; 2002-055579/07.

New isolated polynucleotide variant of neuropeptide Y receptor Y1 (NPY1R) for studying the function of NPY1R, and expressing NPY1R protein for use in screening candidate drugs to treat NPY1R-related diseases.

Claim 17; Page 12; 48pp; English.

The invention relates to single nucleotide polymorphisms in the human neuropeptide Y receptor Y1 (NPY1R) gene. A method for haplotyping the NPY1R gene in an individual comprises identifying the nucleotide at one or more polymorphic sites and determining whether one of the copies of the gene is defined by one of the NPY1R haplotypes given in the specification or whether both copies are defined by a haplotype pair.

This method is useful in genotyping, whereby all possible haplotype pairs can be assigned to specific genotypes. An association between a trait and a haplotype or haplotype pair of the NPY1R gene can be identified by comparing the frequency of the haplotype or haplotype pair in a population exhibiting the trait with the frequency of the haplotype or haplotype pair in a reference population, where a higher haplotype frequency in the trait population indicates the trait is associated with the haplotype or haplotype pair. NPY1R and its corresponding DNA are used for studying the expression and function of NPY1R, for use in screening for candidate drugs to treat diseases related to NPY1R activity, such as cardiovascular diseases (e.g. hypertension) and depression. The sequences are also useful for studying the effect of variation on the biological activity of NPY1R as well as on the binding affinity of candidate drugs targeting NPY1R. Sequences AAS95637-AAS95659 represent allele-specific oligonucleotide probes, sequencing primers, PCR primers and PCR primer universal tails used to detect NPY1R gene polymorphisms

Sequence 10 BP; 6 A; 1 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 10;  
Best Local Similarity 100.0%; Pred. No. 8.9e+02;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 918 TCTTTCCTT 927  
| | | | |  
D 10 TCTTTCCTT 1

RESULT 655

ABK55553

ABK55553 standard; DNA; 10 BP.

AC ABK55553;

18-JUN-2002 (first entry)

Selectin L Lymphocyte Adhesion Molecule 1 (SELL) oligonucleotide #89.

Human; Selectin L Lymphocyte Adhesion Molecule 1; SELL; neonatal pertussis; whooping cough; haplotyping; primer; allele-specific oligonucleotide; ss.

Homo sapiens.

WO200216654-A1.

28-FEB-2002.

27-AUG-2001; 2001WO-US026675.

25-AUG-2000; 2000US-0228262P.

(GENA-) GENAISSANCE PHARM INC.

Anastasio AE, Bieglecki KM, Kliem SE, Koshiy B, Kumar AM;

WPI; 2002-292071/33.

Novel genetic variants of selectin L lymphocyte adhesion molecule 1 (SELL) gene useful for therapeutic purposes and for expressing SELL protein useful in identifying drugs to treat whooping cough.

Claim 19; Page 15; 137pp; English.

The invention relates to an isolated polynucleotide (I) comprising a nucleotide sequence which is a polymorphic variant of a reference sequence for Selectin L Lymphocyte Adhesion Molecule 1 (SELL) gene. SELL polypeptide is useful for screening for drugs targeting the polypeptide. Oligonucleotides derived from (I) are used to target SELL and a haplotype or haplotype pair of SELL gene. These are useful in developing diagnostic tests and therapeutic treatments for neonatal pertussis (whooping cough). (I) is useful for studying the expression and function of SELL and expressing SELL protein for use in screening for candidate drugs to treat

CC diseases related to SELL activity. The polymorphism and haplotype data  
 CC are useful for validating whether SELL is a suitable target for drugs to  
 CC treat whooping cough, screening for such drugs and reducing bias in  
 CC clinical trials of such drugs. Establishing the SELL haplotype or  
 CC haplotype pair of an individual is useful for improving the efficiency  
 CC and reliability of several steps in the discovery and development of  
 CC drugs for treating diseases associated with SELL activity e.g. neonatal  
 CC pertussis (whooping cough). The haplotyping method is useful to validate  
 CC SELL as a candidate target for treating a specific condition or disease  
 CC predicted to be associated with SELL activity. The method is also useful  
 CC in screening for compounds targeting SELL to treat a specific condition  
 CC or disease predicted to be associated with SELL activity, e.g. detecting  
 CC which of the SELL haplotypes or haplotype pairs present in individual  
 CC members of a population with the specific disease of interest enables one  
 CC to screen for compounds that display the highest desired agonist or  
 CC antagonist activity for each of the most frequent SELL isoforms present  
 CC in the disease population. A polymorphic variant of SELL is useful in  
 CC studying the effect of the variation on the biological activity of SELL,  
 CC on the binding affinity of candidate drugs targeting SELL for the  
 CC treatment of neonatal pertussis (whooping cough) and in assays to measure  
 CC the binding affinities of one or more candidate drugs targeting the SELL  
 CC protein. ABK5465-ABK5559 represent SELL gene allele-specific  
 CC oligonucleotides of the invention  
 XX  
 SQ Sequence 10 BP; 1 A; 2 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 8.9e+02;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CY 901 CTGGTCATT 910  
 |||||  
 Db 1 CTGGTCATT 10

## RESULT 656

ABV63191/c  
 ID ABV63191 standard; cDNA; 11 BP.

AC ABV63191;

DT 21-OCT-2002 (first entry)

DE Human skin EST 977.

FW Human; skin; dermatological; vulnary; antipsoriatic; antiseborrhaeic;  
 KW immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;  
 KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.

XX Homo sapiens.

CS WO200253774-A2.

FN 11-JUL-2002.

PF 20-DEC-2001; 2001WO-EP015179.

FR 03-JAN-2001; 2001DE-01000127.

PA (HENKEL KGAA.

PI Petersohn D, Conradt M, Hofmann K;

DR WPI; 2002-590638/63.

XX In vitro identification of skin-expressed genes, useful for determining  
 PT homeostasis and identifying cosmetic or pharmaceutical agents against  
 PT e.g. skin cancer.

PS Disclosure, Page 52; 1345pp; German.

XX The invention relates to in vitro identification (M1) of genes expressed  
 CC in the skin of humans or animals by subjecting a mixture of genetically

CC encoded factors from skin, to serial analysis of gene expression (SAGE)  
 CC so as to identify skin-expressed genes and quantify their expression.  
 CC (M1) is useful for identifying genes involved in skin homeostasis; to  
 CC determine skin homeostasis and to test agent (A) that maintains or  
 CC promotes skin homeostasis or that can be used for treating skin  
 CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;  
 CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;  
 CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the  
 CC skin. The present sequence is that of a human expressed sequence tag  
 CC (EST) of the invention  
 XX

SQ Sequence 11 BP; 6 A; 2 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 11;  
 Best Local Similarity 100.0%; Pred. No. 9.5e+02;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CY 910 TTCTTTGGTC 919

Db 10 TTCTTTGGTC 1

## RESULT 657

ABV70612/c

ID ABV70612 standard; cDNA; 11 BP.

XX

AC ABV70612;

DT 21-OCT-2002 (first entry)

DE Human skin EST 8398.

XX Human; skin; dermatological; vulnary; antipsoriatic; antiseborrhaeic;  
 KW immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;  
 KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.

XX Homo sapiens.

XX WO200253774-A2.

XX 11-JUL-2002.

XX 20-DEC-2001; 2001WO-EP015179.

XX 03-JAN-2001; 2001DE-01000127.

XX (HENKEL KGAA.

PI Petersohn D, Conradt M, Hofmann K;

XX WPI; 2002-590638/63.

XX In vitro identification of skin-expressed genes, useful for determining  
 PT homeostasis and identifying cosmetic or pharmaceutical agents against  
 PT e.g. skin cancer.

PS Claim 24; Page 268; 1345pp; German.

XX The invention relates to in vitro identification (M1) of genes expressed  
 CC in the skin of humans or animals by subjecting a mixture of genetically  
 CC encoded factors from skin, to serial analysis of gene expression (SAGE)  
 CC so as to identify skin-expressed genes and quantify their expression.  
 CC (M1) is useful for identifying genes involved in skin homeostasis; to  
 CC determine skin homeostasis and to test agent (A) that maintains or  
 CC promotes skin homeostasis or that can be used for treating skin  
 CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;  
 CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;  
 CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the  
 CC skin. The present sequence is that of a human expressed sequence tag  
 CC (EST) of the invention  
 XX

SQ Sequence 11 BP; 6 A; 2 C; 3 G; 0 T; 0 U; 0 Other;

```

Query Match      13.7%; Score 10; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 9.5e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Y 910 TTCTTTGGTC 919
b 10 TTCTTTGGTC 1

RESULT 658
BV67520
D ABV67520 standard; cDNA; 11 BP.
X C ABV67520;
X T 21-OCT-2002 (first entry)
X E Human skin EST 5306.
X N Human; skin; dermatological; vulnery; antipsoriatic; antiseborrhaeic;
X N immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;
X N psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.
X Z Homo sapiens.
X Y WO200253774-A2.
X C 11-JUL-2002.
X Z 20-DEC-2001; 2001WO-EP015179.
X Z 03-JAN-2001; 2001DE-01000127.
X A (HENK ) HENKEL KGAA.
X L Petersohn D, Conradt M, Hofmann K;
X R WPI; 2002-590638/63.
X T In vitro identification of skin-expressed genes, useful for determining
X T homeostasis and identifying cosmetic or pharmaceutical agents against
X T e.g. skin cancer.
X Z Disclosure; Page 178; 1345pp; German.
X C The invention relates to in vitro identification (M1) of genes expressed
X C in the skin of humans or animals by subjecting a mixture of genetically
X C encoded factors from skin, to serial analysis of gene expression (SAGE)
X C so as to identify skin-expressed genes and quantify their expression.
X C (M1) is useful for identifying genes involved in skin homeostasis; to
X C determine skin homeostasis and to test agent (A) that maintains or
X C promotes skin homeostasis or that can be used for treating skin
X C disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;
X C ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;
X C rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the
X C skin. The present sequence is that of a human expressed sequence tag
X C (EST) of the invention
X X Sequence 11 BP; 2 A; 2 C; 1 G; 6 T; 0 U; 0 Other;

Query Match      13.7%; Score 10; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 9.5e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Y 904 GTCATTTCCT 913
b 1 GTCATTTCCT 10

RESULT 659
BV67754
D ABV67754 standard; cDNA; 11 BP.
X Z Homo sapiens.

```

---

```

AC ABV67754;
XX 21-OCT-2002 (first entry)
XX Human skin EST 5540.
XX Human; skin; dermatological; vulnery; antipsoriatic; antiseborrhaeic;
XX immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;
XX psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.
XX Homo sapiens.
XX WO200253774-A2.
XX 11-JUL-2002.
XX 20-DEC-2001; 2001WO-EP015179.
XX 03-JAN-2001; 2001DE-01000127.
XX (HENK ) HENKEL KGAA.
XX Petersohn D, Conradt M, Hofmann K;
XX WPI; 2002-590638/63.
XX In vitro identification of skin-expressed genes, useful for determining
XX homeostasis and identifying cosmetic or pharmaceutical agents against
XX e.g. skin cancer.
XX Disclosure; Page 178; 1345pp; German.
XX The invention relates to in vitro identification (M1) of genes expressed
XX in the skin of humans or animals by subjecting a mixture of genetically
XX encoded factors from skin, to serial analysis of gene expression (SAGE)
XX so as to identify skin-expressed genes and quantify their expression.
XX (M1) is useful for identifying genes involved in skin homeostasis; to
XX determine skin homeostasis and to test agent (A) that maintains or
XX promotes skin homeostasis or that can be used for treating skin
XX disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;
XX ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;
XX rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the
XX skin. The present sequence is that of a human expressed sequence tag
XX (EST) of the invention
XX Sequence 11 BP; 0 A; 1 C; 2 G; 8 T; 0 U; 0 Other;

Query Match      13.7%; Score 10; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 9.5e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 913 TTTGGTCCTTT 922
Db 1 TTTGGTCCTTT 10

RESULT 660
ABL91983
ID ABL91983 standard; cDNA; 11 BP.
XX ABL91983;
XX 30-MAY-2002 (first entry)
XX Human Pan-Endothelial Marker SEQ ID NO 81.
XX Human; mouse; rat; TEM; tumour endothelial marker; NEM; PEM; cytostatic;
XX normal endothelial marker; pan-endothelial marker; immunostimulant;
XX antiangiogenic; tumour; neoangiogenesis; vascularised tumour;
XX polycystic kidney disease; diabetes; retinopathy; rheumatoid arthritis;
XX psoriasis; ss.
XX Homo sapiens.

```







PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 32365; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 12 BP; 4 A; 0 C; 8 G; 0 T; 0 U; 0 Other;  
Query Match 13.7%; Score 10; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 932 CCTCCTCTT 941  
DQ 10 CCTCCTCTT 1  
RESULT 665  
ABI26795  
ID ABI26795 standard; DNA; 12 BP.  
AC ABI26795;  
XX  
XX 22-FEB-2002 (first entry)  
DE Oligonucleotide primer SEQ ID NO 326768 for detecting SNP TSC0033271.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
XX  
XX Claim 1; SEQ ID NO 326768; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 12 BP; 4 A; 0 C; 8 G; 0 T; 0 U; 0 Other;  
Query Match 13.7%; Score 10; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 932 CCTCCTCTT 941  
DQ 10 CCTCCTCTT 1  
RESULT 665  
ABI26795  
ID ABI26795 standard; DNA; 12 BP.  
AC ABI26795;  
XX  
XX 22-FEB-2002 (first entry)  
DE Oligonucleotide primer SEQ ID NO 326768 for detecting SNP TSC0033271.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
XX  
XX Claim 1; SEQ ID NO 32365; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 12 BP; 4 A; 0 C; 8 G; 0 T; 0 U; 0 Other;  
Query Match 13.7%; Score 10; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 932 CCTCCTCTT 941  
DQ 10 CCTCCTCTT 1  
RESULT 666  
ABH97142/C  
ID ABH97142 standard; DNA; 12 BP.  
AC ABH97142;  
XX  
XX 22-FEB-2002 (first entry)  
DE Oligonucleotide primer SEQ ID NO 297135 for detecting SNP TSC0017438.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
XX  
XX Claim 1; SEQ ID NO 297135; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 12 BP; 2 A; 1 C; 6 G; 3 T; 0 U; 0 Other;  
Query Match 13.7%; Score 10; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 958 CGCTACCAAC 967  
DQ 10 CGCTACCAAC 1

CC data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
CC  
XX  
SQ Sequence 12 BP; 3 A; 0 C; 1 G; 8 T; 0 U; 0 Other;  
Query Match 13.7%; Score 10; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 948 TTTAATGTAT 957  
DQ 2 TTTAATGTAT 11  
RESULT 666  
ABH97142/C  
ID ABH97142 standard; DNA; 12 BP.  
AC ABH97142;  
XX  
XX 22-FEB-2002 (first entry)  
DE Oligonucleotide primer SEQ ID NO 297135 for detecting SNP TSC0017438.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
XX  
XX Claim 1; SEQ ID NO 297135; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 12 BP; 2 A; 1 C; 6 G; 3 T; 0 U; 0 Other;  
Query Match 13.7%; Score 10; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 958 CGCTACCAAC 967  
DQ 10 CGCTACCAAC 1

```
3SULT 667
3125204/c
2 ABI25204 standard; DNA; 12 BP.
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000
1001
1002
1003
1004
1005
1006
1007
1008
1009
1010
1011
1012
1013
1014
1015
1016
1017
1018
1019
1020
1021
1022
1023
1024
1025
1026
1027
1028
1029
1030
1031
1032
1033
1034
1035
1036
1037
1038
1039
1040
1041
1042
1043
1044
1045
1046
1047
1048
1049
1050
1051
1052
1053
1054
1055
1056
1057
1058
1059
1060
1061
1062
1063
1064
1065
1066
1067
1068
1069
1070
1071
1072
1073
1074
1075
1076
1077
1078
1079
1080
1081
1082
1083
1084
1085
1086
1087
1088
1089
1090
1091
1092
1093
1094
1095
1096
1097
1098
1099
1100
1101
1102
1103
1104
1105
1106
1107
1108
1109
1110
1111
1112
1113
1114
1115
1116
1117
1118
1119
1120
1121
1122
1123
1124
1125
1126
1127
1128
1129
1130
1131
1132
1133
1134
1135
1136
1137
1138
1139
1140
1141
1142
1143
1144
1145
1146
1147
1148
1149
1150
1151
1152
1153
1154
1155
1156
1157
1158
1159
1160
1161
1162
1163
1164
1165
1166
1167
1168
1169
1170
1171
1172
1173
1174
1175
1176
1177
1178
1179
1180
1181
1182
1183
1184
1185
1186
1187
1188
1189
1190
1191
1192
1193
1194
1195
1196
1197
1198
1199
1200
1201
1202
1203
1204
1205
1206
1207
1208
1209
1210
1211
1212
1213
1214
1215
1216
1217
1218
1219
1220
1221
1222
1223
1224
1225
1226
1227
1228
1229
1230
1231
1232
1233
1234
1235
1236
1237
1238
1239
1240
1241
1242
1243
1244
1245
1246
1247
1248
1249
1250
1251
1252
1253
1254
1255
1256
1257
1258
1259
1260
1261
1262
1263
1264
1265
1266
1267
1268
1269
1270
1271
1272
1273
1274
1275
1276
1277
1278
1279
1280
1281
1282
1283
1284
1285
1286
1287
1288
1289
1290
1291
1292
1293
1294
1295
1296
1297
1298
1299
1300
1301
1302
1303
1304
1305
1306
1307
1308
1309
1310
1311
1312
1313
1314
1315
1316
1317
1318
1319
1320
1321
1322
1323
1324
1325
1326
1327
1328
1329
1330
1331
1332
1333
1334
1335
1336
1337
1338
1339
1340
1341
1342
1343
1344
1345
1346
1347
1348
1349
1350
1351
1352
1353
1354
1355
1356
1357
1358
1359
1360
1361
1362
1363
1364
1365
1366
1367
1368
1369
1370
1371
1372
1373
1374
1375
1376
1377
1378
1379
1380
1381
1382
1383
1384
1385
1386
1387
1388
1389
1390
1391
1392
1393
1394
1395
1396
1397
1398
1399
1400
1401
1402
1403
1404
1405
1406
1407
1408
1409
1410
1411
1412
1413
1414
1415
1416
1417
1418
1419
1420
1421
1422
1423
1424
1425
1426
1427
1428
1429
1430
1431
1432
1433
1434
1435
1436
1437
1438
1439
1440
1441
1442
1443
1444
1445
1446
1447
1448
1449
1450
1451
1452
1453
1454
1455
1456
1457
1458
1459
1460
1461
1462
1463
1464
1465
1466
1467
1468
1469
1470
1471
1472
1473
1474
1475
1476
1477
1478
1479
1480
1481
1482
1483
1484
1485
1486
1487
1488
1489
1490
1491
1492
1493
1494
1495
1496
1497
1498
1499
1500
1501
1502
1503
1504
1505
1506
1507
1508
1509
1510
1511
1512
1513
1514
1515
1516
1517
1518
1519
1520
1521
1522
1523
1524
1525
1526
1527
1528
1529
1530
1531
1532
1533
1534
1535
1536
1537
1538
1539
1540
1541
1542
1543
1544
1545
1546
1547
1548
1549
1550
1551
1552
1553
1554
1555
1556
1557
1558
1559
1560
1561
1562
1563
1564
1565
1566
1567
1568
1569
1570
1571
1572
1573
1574
1575
1576
1577
1578
1579
1580
1581
1582
1583
1584
1585
1586
1587
1588
1589
1590
1591
1592
1593
1594
1595
1596
1597
1598
1599
1600
1601
1602
1603
1604
1605
1606
1607
1608
1609
1610
1611
1612
1613
1614
1615
1616
1617
1618
1619
1620
1621
1622
1623
1624
1625
1626
1627
1628
1629
1630
1631
1632
1633
1634
1635
1636
1637
1638
1639
1640
1641
1642
1643
1644
1645
1646
1647
1648
1649
1650
1651
1652
1653
1654
1655
1656
1657
1658
1659
1660
1661
1662
1663
1664
1665
1666
1667
1668
1669
1670
1671
1672
1673
1674
1675
1676
1677
1678
1679
1680
1681
1682
1683
1684
1685
1686
1687
1688
1689
1690
1691
1692
1693
1694
1695
1696
1697
1698
1699
1700
1701
1702
1703
1704
1705
1706
1707
1708
1709
1710
1711
1712
1713
1714
1715
1716
1717
1718
1719
1720
1721
1722
1723
1724
1725
1726
1727
1728
1729
1730
1731
1732
1733
1734
1735
1736
1737
1738
1739
1740
1741
1742
1743
1744
1745
1746
1747
1748
1749
1750
1751
1752
1753
1754
1755
1756
1757
1758
1759
1760
1761
1762
1763
1764
1765
1766
1767
1768
1769
1770
1771
1772
1773
1774
1775
1776
1777
1778
1779
1780
1781
1782
1783
1784
1785
1786
1787
1788
1789
1790
1791
1792
1793
1794
1795
1796
1797
1798
1799
1800
1801
1802
1803
1804
1805
1806
1807
1808
1809
1810
1811
1812
1813
1814
1815
1816
1817
1818
1819
1820
1821
1822
1823
1824
1825
1826
1827
1828
1829
1830
1831
1832
1833
1834
1835
1836
1837
1838
1839
1840
1841
1842
1843
1844
1845
1846
1847
1848
1849
1850
1851
1852
1853
1854
1855
1856
1857
1858
1859
1860
1861
1862
1863
1864
1865
1866
1867
1868
1869
1870
1871
1872
1873
1874
1875
1876
1877
1878
1879
1880
1881
1882
1883
1884
1885
1886
1887
1888
1889
1890
1891
1892
1893
1894
1895
1896
1897
1898
1899
1900
1901
1902
1903
1904
1905
1906
1907
1908
1909
1910
1911
1912
1913
1914
1915
1916
1917
1918
1919
1920
1921
1922
1923
1924
1925
1926
1927
1928
1929
1930
1931
1932
1933
1934
1935
1936
1937
1938
1939
1940
1941
1942
1943
1944
1945
1946
1947
1948
1949
1950
1951
1952
1953
1954
1955
1956
1957
1958
1959
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971
1972
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
2031
2032
2033
2034
2035
2036
2037
2038
2039
2040
2041
2042
2043
2044
2045
2046
2047
2048
2049
2050
2051
2052
2053
2054
2055
2056
2057
2058
2059
2060
2061
2062
2063
2064
2065
2066
2067
2068
2069
2070
2071
2072
2073
2074
2075
2076
2077
2078
2079
2080
2081
2082
2083
2084
2085
2086
2087
2088
2089
2090
2091
2092
2093
2094
2095
2096
2097
2098
2099
2100
2101
2102
2103
2104
2105
2106
2107
2108
2109
2110
2111
2112
2113
2114
2115
2116
2117
2118
2119
2120
2121
2122
2123
2124
2125
2126
2127
2128
2129
2130
2131
2132
2133
2134
2135
2136
2137
2138
2139
2140
2141
2142
2143
2144
2145
2146
2147
2148
2149
2150
2151
2152
2153
2154
2155
2156
2157
2158
2159
2160
2161
2162
2163
2164
2165
2166
2167
2168
2169
2170
2171
2172
2173
2174
2175
2176
2177
2178
2179
2180
2181
2182
2183
2184
2185
2186
2187
2188
2189
2190
2191
2192
2193
2194
2195
2196
2197
2198
2199
2200
2201
2202
2203
2204
2205
2206
2207
2208
2209
2210
2211
2212
2213
2214
2215
2216
2217
2218
2219
2220
2221
2222
2223
2224
2225
2226
2227
2228
2229
2230
2231
2232
2233
2234
2235
2236
2237
2238
2239
2240
2241
2242
2243
2244
2245
2246
2247
2248
2249
2250
2251
2252
2253
2254
2255
2256
2257
2258
2259
2260
2261
2262
2263
2264
2265
2266
2267
2268
2269
2270
2271
2272
2273
2274
2275
2276
2277
2278
2279
2280
2281
2282
2283
2284
2285
2286
2287
2288
2289
2290
2291
2292
2293
2294
2295
2296
2297
2298
2299
2300
2301
2302
2303
2304
2305
2306
2307
2308
2309
2310
2311
2312
2313
2314
2315
2316
2317
2318
2319
2320
2321
2322
2323
2324
2325
2326
2327
2328
2329
2330
2331
2332
2333
2334
2335
2336
2337
2338
2339
2340
2341
2342
2343
2344
2345
2346
2347
2348
2349
2350
2351
2352
2353
2354
2355
2356
2357
2358
2359
2360
2361
2362
2363
2364
2365
2366
2367
2368
2369
2370
2371
2372
2373
2374
2375
2376
2377
2378
2379
2380
2381
2382
2383
2384
2385
2386
2387
2388
2389
2390
2391
2392
2393
2394
2395
2396
2397
2398
2399
2400
2401
2402
2403
2404
2405
2406
2407
2408
2409
2410
2411
2412
2413
2414
2415
2416
2417
2418
2419
2420
2421
2422
2423
2424
2425
2426
2427
2428
2429
2430
2431
2432
2433
2434
2435
2436
2437
2438
2439
2440
2441
2442
2443
2444
2445
2446
2447
2448
2449
2450
2451
2452
2453
2454
2455
2456
2457
2458
2459
2460
2461
2462
2463
2464
2465
2466
2467
2468
2469
2470
2471
2472
2473
2474
2475
2476
2477
2478
2479
2480
2481
2482
2483
2484
2485
2486
2487
2488
2489
2490
2491
2492
2493
2494
2495
2496
2497
2498
2499
2500
2501
2502
2503
2504
2505
2506
2507
2508
2509
2510
2511
2512
2513
2514
2515
2516
2517
2518
2519
2520
2521
2522
2523
2524
2525
2526
2527
2528
2529
2530
2531
2532
2533
2534
2535
2536
2537
2538
2539
2540
2541
2542
2543
2544
2545
2546
2547
2548
2549
2550
2551
2552
2553
2554
2555
2556
2557
2558
2559
2560
2561
2562
2563
2564
2565
2566
2567
2568
2569
2570
2571
2572
2573
2574
2575
2576
2577
2578
2579
2580
2581
2582
2583
2584
2585
2586
2587
2588
2589
2590
2591
2592
2593
2594
2595
2596
2597
2598
2599
2600
2601
2602
2603
2604
2605
2606
2607
2608
2609
2610
2611
2612
2613
2614
2615
2616
2617
2618
2619
2620
2621
2622
2623
2624
2625
2626
2627
2628
2629
2630
2631
2632
2633
2634
2635
2636
2637
2638
2639
2640
2641
2642
2643
2644
2645
2646
2647
2648
2649
2650
2651
2652
2653
2654
2655
2656
2657
2658
2659
2660
2661
2662
2663
```

PA (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX Claim 1; SEQ ID NO 293399; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 12 BP; 5 A; 5 C; 0 G; 2 T; 0 U; 0 Other;  
  
Query Match 13.7%; Score 10; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 945 TGGTTTAATG 954  
DB 11 TGGTTTAATG 2  
  
RESULT 670  
ABI36751  
ID ABI36751 standard; DNA; 12 BP.  
AC ABI36751;  
XX 22-FEB-2002 (first entry)  
XX Oligonucleotide primer SEQ ID NO 336724 for detecting SNP TSC0008903.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX Claim 1; SEQ ID NO 336724; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic

CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 12 BP; 4 A; 0 C; 1 G; 7 T; 0 U; 0 Other;  
  
Query Match 13.7%; Score 10; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 948 TTTAATGTAT 957  
DB 2 TTTAATGTAT 11  
  
RESULT 671  
ABH67436  
ID ABH67436 standard; DNA; 12 BP.  
XX ABH67436;  
AC ABH67436;  
XX 22-FEB-2002 (first entry)  
XX Oligonucleotide primer SEQ ID NO 267413 for detecting SNP TSC0000187.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX Claim 1; SEQ ID NO 267413; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 12 BP; 2 A; 3 C; 0 G; 7 T; 0 U; 0 Other;



EN WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
PR  
PR 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 281171; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 12 BP; 1 A; 5 C; 0 G; 6 T; 0 U; 0 Other;  
Query Match 13.7%; Score 10; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 927 TTTATCCCTC 936  
Db 1 TTTATCCCTC 10  
RESULT 675  
ABI52939/c  
ID ABI52939 standard; DNA; 12 BP.  
AC ABI52939;  
XX  
DT 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide primer SEQ ID NO 352912 for detecting SNP TSC0048171.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
DR

XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
XX Claim 1; SEQ ID NO 352912; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 12 BP; 7 A; 0 C; 2 G; 3 T; 0 U; 0 Other;  
Query Match 13.7%; Score 10; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 905 TCATTTCCTT 914  
Db 10 TCATTTCCTT 1  
RESULT 676  
ABI71569/c  
ID ABI71569 standard; DNA; 12 BP.  
XX  
XX ABI71569;  
XX  
DT 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide primer SEQ ID NO 371542 for detecting SNP TSC0058846.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
XX Claim 1; SEQ ID NO 371542; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ

oligomers are also used for detecting cell type differentiation. ABC00010  
-ABCG9989, ABFG0010-ABFG9989, ABH00010-ABH99989 and ABI00010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences

Sequence 12 BP; 8 A; 0 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 12;

Best Local Similarity 100.0%; Pred. No. 1e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

906 CATTTCCTTT 915

12 CATTTCCTTT 3

RESULT 677

ABH93598

ABH93598 standard; DNA; 12 BP.

ABH93598;

22-FEB-2002 (first entry)

Oligonucleotide primer SEQ ID NO 293591 for detecting SNP TSC0015696.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPITG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

Claim 1; SEQ ID NO 293591; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABCG9989, ABFG0010-ABFG9989, ABH00010-ABH99989 and ABI00010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences

Sequence 12 BP; 3 A; 0 C; 4 G; 5 T; 0 U; 0 Other;

Query Match

Best Local Similarity 100.0%; Score 10; DB 1; Length 12;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 945 TGGTTTAATG 954

|||||

1 TGGTTTAATG 10

RESULT 678

ABH94275/c

ABH94275 standard; DNA; 12 BP.

ABH94275;

22-FEB-2002 (first entry)

Oligonucleotide primer SEQ ID NO 294268 for detecting SNP TSC0015029.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPITG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

Claim 1; SEQ ID NO 294268; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABCG9989, ABFG0010-ABFG9989, ABH00010-ABH99989 and ABI00010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences

Sequence 12 BP; 6 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

Query Match

Best Local Similarity 13.7%; Score 10; DB 1; Length 12;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 946 GGTTTAATGT 955

|||||

11 GGTTTAATGT 2

RESULT 679

ABH98673/c

ABH98673 standard; DNA; 12 BP.

ABH98673;

22-FEB-2002 (first entry)

```

DE Oligonucleotide primer SEQ ID NO 298666 for detecting SNP TSC0018226.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
OS Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 298666; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 7 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 944 TTGGTTTAAAT 953
DB 11 TTGGTTTAAAT 2
RESULT 680
ABI34373
ID ABI34373 standard; DNA; 12 BP.
XX ABI34373;
XX 22-FEB-2002 (first entry)
XX Oligonucleotide primer SEQ ID NO 334346 for detecting SNP TSC0038098.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.

```

```

XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 334346; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 2 A; 4 C; 0 G; 6 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 936 CCTCTTCATT 945
DB 3 CCTCTTCATT 12
RESULT 681
ABH99898/c
ID ABH99898 standard; DNA; 12 BP.
XX ABH99898;
XX 22-FEB-2002 (first entry)
XX Oligonucleotide primer SEQ ID NO 299891 for detecting SNP TSC0018796.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX

```

```
Claim 1; SEQ ID NO 299891; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 12 BP; 5 A; 0 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

931 TCCTCTCTCT 940
12 TCCTCTCTCT 3

RESULT 682
3168853
ABI68853 standard; DNA; 12 BP.
ABI68853;
22-FEB-2002 (first entry)

Oligonucleotide primer SEQ ID NO 368826 for detecting SNP TSC0057250.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB0000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

Claim 1; SEQ ID NO 368826; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

Claim 1; SEQ ID NO 299891; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 12 BP; 5 A; 0 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

931 TCCTCTCTCT 940
12 TCCTCTCTCT 3

RESULT 683
ABI66318/C
ID ABI66318 standard; DNA; 12 BP.
AC ABI66318;
22-FEB-2002 (first entry)

Oligonucleotide primer SEQ ID NO 366291 for detecting SNP TSC0004626.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB0000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

Claim 1; SEQ ID NO 366291; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 12 BP; 8 A; 0 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

926 TTTATCCCT 935
10 TTTATCCCT 1
```



```

RESULT 684
ABH98729/c
ID ABH98729 standard; DNA; 12 BP.
XX AC
XX ABH98729;
XX DT
XX 22-FEB-2002 (first entry)
XX DE
XX Oligonucleotide primer SEQ ID NO 298722 for detecting SNP TSC0018249.
XX KW
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS
XX Homo sapiens.
XX PN
XX WO200177384-A2.
XX PD
XX 18-OCT-2001.
XX PR
XX 22-FEB-2002 (first entry)
XX DE
XX Oligonucleotide primer SEQ ID NO 298722 for detecting SNP TSC0018249.
XX KW
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS
XX Homo sapiens.
XX PN
XX WO200177384-A2.
XX PD
XX 18-OCT-2001.
XX PR
XX 06-APR-2001; 2001WO-IB000713.
XX PA
XX (EPIG-) EPIGENOMICS AG.
XX PI
XX Olek A, Piepenbrock C, Berlin K;
XX DR
XX WPI; 2001-657177/75.
XX PT
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX PS
XX Claim 1; SEQ ID NO 298722; 29pp + Sequence Listing; German.
XX CC
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX SQ
XX Sequence 12 BP; 8 A; 1 C; 0 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 13.7%; Score 10; DB 1; Length 12;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 948 TTTAATGCTAT 957
XX Db 10 TTTAATGCTAT 1
XX
XX RESULT 685
ABH79432/c
ID ABH79432 standard; DNA; 12 BP.
XX AC
XX ABH79432;
XX DT
XX 22-FEB-2002 (first entry)
XX DE
XX Oligonucleotide primer SEQ ID NO 279425 for detecting SNP TSC0007347.
XX KW
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS
XX Homo sapiens.
XX PN
XX WO200177384-A2.
XX PD
XX 18-OCT-2001.
XX PR
XX 06-APR-2001; 2001WO-IB000713.
XX PA
XX (EPIG-) EPIGENOMICS AG.
XX PI
XX Olek A, Piepenbrock C, Berlin K;
XX DR
XX WPI; 2001-657177/75.
XX PT
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX PS
XX Claim 1; SEQ ID NO 298722; 29pp + Sequence Listing; German.
XX CC
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX SQ
XX Sequence 12 BP; 8 A; 1 C; 0 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 13.7%; Score 10; DB 1; Length 12;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 948 TTTAATGCTAT 957
XX Db 10 TTTAATGCTAT 1
XX
XX RESULT 686
ABH34016/c
ID ABH34016 standard; DNA; 12 BP.
XX AC
XX ABH34016;
XX DT
XX 22-FEB-2002 (first entry)
XX DE
XX Oligonucleotide primer SEQ ID NO 333989 for detecting SNP TSC0037874.
XX KW
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS
XX Homo sapiens.
XX PN
XX WO200177384-A2.
XX PD
XX 18-OCT-2001.
XX PR
XX 06-APR-2001; 2001WO-IB000713.
XX PA
XX (EPIG-) EPIGENOMICS AG.
XX PI
XX Olek A, Piepenbrock C, Berlin K;
XX DR
XX WPI; 2001-657177/75.
XX PT
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX PS
XX Claim 1; SEQ ID NO 279425; 29pp + Sequence Listing; German.
XX CC
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX SQ
XX Sequence 12 BP; 1 A; 1 C; 6 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 13.7%; Score 10; DB 1; Length 12;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 958 CGCTACCAAC 967
XX Db 12 CGCTACCAAC 3
XX
XX RESULT 686
ABH34016/c
ID ABH34016 standard; DNA; 12 BP.
XX AC
XX ABH34016;
XX DT
XX 22-FEB-2002 (first entry)
XX DE
XX Oligonucleotide primer SEQ ID NO 333989 for detecting SNP TSC0037874.
XX KW
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS
XX Homo sapiens.
XX PN
XX WO200177384-A2.
XX PD
XX 18-OCT-2001.
XX PR
XX 06-APR-2001; 2001WO-IB000713.
XX PA
XX (EPIG-) EPIGENOMICS AG.
XX PI
XX Olek A, Piepenbrock C, Berlin K;
XX DR
XX WPI; 2001-657177/75.
XX PT
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX PS
XX Claim 1; SEQ ID NO 279425; 29pp + Sequence Listing; German.
XX CC
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX SQ
XX Sequence 12 BP; 1 A; 1 C; 6 G; 4 T; 0 U; 0 Other;

```

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 333989; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 12 BP; 6 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1e+03; 0; Indels 0; Gaps 0;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

944 TTGGTTTAAAT 953

|||||  
12 TTGGTTTAAAT 3

RESULT 687

ABI51574/c  
ABI51574 standard; DNA; 12 BP.

ABI51574;

22-FEB-2002 (first entry)

Oligonucleotide primer SEQ ID NO 351547 for detecting SNP TSC0047371.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 351547; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 12 BP; 6 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1e+03; 0; Indels 0; Gaps 0;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 948 TTTAATGTAT 957

|||||  
12 TTTAATGTAT 3

RESULT 688

ABI81334  
ID ABI81334 standard; DNA; 12 BP.

XX AC ABI81334;

DT 22-FEB-2002 (first entry)

XX Oligonucleotide primer SEQ ID NO 381307 for detecting SNP TSC0064260.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

PN WO200177384-A2.

PD 18-OCT-2001.

PF 06-APR-2001; 2001WO-IB000713.

PR 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

PI Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.

PS Claim 1; SEQ ID NO 381307; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 12 BP; 3 A; 3 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 12;

```
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 926 TTTATCCCT 935
   |||||
   2 TTTATCCCT 11

RESULT 689
ABI25221
ID ABI25221 standard; DNA; 12 BP.
XX
AC ABI25221;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide primer SEQ ID NO 325194 for detecting SNP TSC0032450.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 325194; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 12 BP; 3 A; 2 C; 0 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 13.7%; Score 10; DB 1; Length 12;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 906 CATTTCTTT 915
   |||||
   2 CATTTCTTT 11

RESULT 690
ABI38861
ID ABI38861 standard; DNA; 12 BP.
XX
XX ABI38861;
AC
```

```
XX
DT 22-FEB-2002 (first entry)
XX
XX Oligonucleotide primer SEQ ID NO 338834 for detecting SNP TSC0040703.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 338834; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 12 BP; 4 A; 0 C; 1 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 13.7%; Score 10; DB 1; Length 12;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 948 TTTAATGTAT 957
   |||||
   1 TTTAATGTAT 10

RESULT 691
ABI59029/c
ID ABI59029 standard; DNA; 12 BP.
XX
XX ABI59029;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide primer SEQ ID NO 359002 for detecting SNP TSC0051421.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
```

18-OCT-2001.  
 06-APR-2001; 2001WO-IB000713.  
 07-APR-2000; 2000DE-01019173.  
 (EPIG-) EPIGENOMICS AG.  
 Olek A, Piepenbrock C, Berlin K;  
 WPI; 2001-657177/75.  
 Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
 Claim 1; SEQ ID NO 359002; 29pp + Sequence Listing; German.  
 This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
 Sequence 12 BP; 4 A; 0 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 13.7%; Score 10; DB 1; Length 12;  
 Best Local Similarity 100.0%; Pred. No. 1e+03; 0; Indels 0; Gaps 0;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 929 TATCCCTCCT 938  
 |||||  
 12 TATCCCTCCT 3  
 RESULT 692  
 3163458/c  
 ABI63458 standard; DNA; 12 BP.  
 ABI63458;  
 22-FEB-2002 (first entry)  
 Oligonucleotide primer SEQ ID NO 363431 for detecting SNP TSC0053844.  
 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 Homo sapiens.  
 WO200177384-A2.  
 18-OCT-2001.  
 06-APR-2001; 2001WO-IB000713.  
 07-APR-2000; 2000DE-01019173.  
 (EPIG-) EPIGENOMICS AG.  
 Olek A, Piepenbrock C, Berlin K;  
 WPI; 2001-657177/75.  
 Set of oligonucleotides, useful for diagnosis and cell typing, is

designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
 Claim 1; SEQ ID NO 363431; 29pp + Sequence Listing; German.  
 This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
 Sequence 12 BP; 7 A; 2 C; 0 G; 3 T; 0 U; 0 Other;  
 Query Match 13.7%; Score 10; DB 1; Length 12;  
 Best Local Similarity 100.0%; Pred. No. 1e+03; 0; Indels 0; Gaps 0;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 948 TTTAATGAT 957  
 |||||  
 11 TTTAATGAT 2  
 RESULT 693  
 ABI63849  
 ID ABI63849 standard; DNA; 12 BP.  
 AC ABI63849;  
 22-FEB-2002 (first entry)  
 Oligonucleotide primer SEQ ID NO 363822 for detecting SNP TSC0054076.  
 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 Homo sapiens.  
 WO200177384-A2.  
 18-OCT-2001.  
 06-APR-2001; 2001WO-IB000713.  
 07-APR-2000; 2000DE-01019173.  
 (EPIG-) EPIGENOMICS AG.  
 Olek A, Piepenbrock C, Berlin K;  
 WPI; 2001-657177/75.  
 Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
 Claim 1; SEQ ID NO 363822; 29pp + Sequence Listing; German.  
 This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073

CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 12 BP; 2 A; 2 C; 0 G; 8 T; 0 U; 0 Other;  
  
Query Match 13.7%; Score 10; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 906 CATTTTCTTT 915  
| | | | |  
Db 2 CATTTTCTTT 11  
  
RESULT 694  
ABH99357  
ID ABH99357 standard; DNA; 12 BP.  
XX  
AC ABH99357;  
XX  
DT 22-FEB-2002 (first entry)  
XX  
XX Oligonucleotide primer SEQ ID NO 299350 for detecting SNP TSC0018533.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
XX Claim 1; SEQ ID NO 299350; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 12 BP; 3 A; 0 C; 2 G; 7 T; 0 U; 0 Other;  
  
Query Match 13.7%; Score 10; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 948 TTTAATGTAT 957  
| | | | |

Db 1 TTTAATGTAT 10  
  
RESULT 695  
ABI64660/c  
ID ABI64660 standard; DNA; 12 BP.  
XX  
AC ABI64660;  
XX  
DT 22-FEB-2002 (first entry)  
XX  
XX Oligonucleotide primer SEQ ID NO 364633 for detecting SNP TSC0005622.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
XX Claim 1; SEQ ID NO 364633; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 12 BP; 8 A; 0 C; 3 G; 1 T; 0 U; 0 Other;  
  
Query Match 13.7%; Score 10; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 905 TCATTTTCTT 914  
| | | | |  
Db 11 TCATTTTCTT 2  
  
RESULT 696  
ABI21238/c  
ID ABI21238 standard; DNA; 12 BP.  
XX  
AC ABI21238;  
XX  
DT 22-FEB-2002 (first entry)  
XX  
XX Oligonucleotide primer SEQ ID NO 321211 for detecting SNP TSC0030111.  
XX

1 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 2 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 3 central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 4 Homo sapiens.  
 5 WO200177384-A2.  
 6 18-OCT-2001.  
 7 06-APR-2001; 2001WO-IB000713.  
 8 07-APR-2000; 2000DE-01019173.  
 9 (EPIG-) EPIGENOMICS AG.  
 10 Olek A, Piepenbrock C, Berlin K;  
 11 WPI; 2001-657177/75.  
 12 Set of oligonucleotides, useful for diagnosis and cell typing, is  
 13 designed to detect single-nucleotide polymorphisms and cytosine  
 14 methylation status.  
 15 Claim 1; SEQ ID NO 321211; 29pp + Sequence Listing; German.  
 16 This invention describes novel oligonucleotide primers or peptide nucleic  
 17 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 18 and cytosine methylation status in chemically pretreated genomic DNA. The  
 19 oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 20 range of diseases including immune system, gastrointestinal, respiratory,  
 21 central nervous system, cardiovascular and metabolic disorders. The  
 22 oligomers are also used for detecting cell type differentiation. ABC00010  
 23 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 24 represent the oligomers described in the invention. NOTE: The sequence  
 25 data for this patent did not form part of the printed specification, but  
 26 was obtained in electronic format from WIPO at  
 27 ftp.wipo.int/pub/published\_pct\_sequences  
 28 Sequence 12 BP; 6 A; 2 C; 0 G; 4 T; 0 U; 0 Other;  
 29  
 30 Query Match 13.7%; Score 10; DB 1; Length 12;  
 31 Best Local Similarity 100.0%; Pred. No. 1e+03;  
 32 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 33  
 34 943 ATTGGTTTAA 952  
 35 |||||  
 36 10 ATTGGTTTAA 1  
 37  
 38 RESULT 697  
 39 ABI46731/c  
 40 ABI46731 standard; DNA; 12 BP.  
 41 ABI46731;  
 42 22-FEB-2002 (first entry)  
 43 Oligonucleotide primer SEQ ID NO 346704 for detecting SNP TSC0044713.  
 44 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 45 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 46 central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 47 Homo sapiens.  
 48 WO200177384-A2.  
 49 18-OCT-2001.  
 50 06-APR-2001; 2001WO-IB000713.  
 51 (EPIG-) EPIGENOMICS AG.  
 52 Olek A, Piepenbrock C, Berlin K;  
 53 WPI; 2001-657177/75.  
 54 Set of oligonucleotides, useful for diagnosis and cell typing, is  
 55 designed to detect single-nucleotide polymorphisms and cytosine  
 56 methylation status.  
 57 Claim 1; SEQ ID NO 349880; 29pp + Sequence Listing; German.

XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 XX designed to detect single-nucleotide polymorphisms and cytosine  
 XX methylation status.  
 XX Claim 1; SEQ ID NO 346704; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 XX and cytosine methylation status in chemically pretreated genomic DNA. The  
 XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 XX range of diseases including immune system, gastrointestinal, respiratory,  
 XX central nervous system, cardiovascular and metabolic disorders. The  
 XX oligomers are also used for detecting cell type differentiation. ABC00010  
 XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 XX represent the oligomers described in the invention. NOTE: The sequence  
 XX data for this patent did not form part of the printed specification, but  
 XX was obtained in electronic format from WIPO at  
 XX ftp.wipo.int/pub/published\_pct\_sequences  
 XX SQ Sequence 12 BP; 5 A; 0 C; 4 G; 3 T; 0 U; 0 Other;  
 XX  
 XX Query Match 13.7%; Score 10; DB 1; Length 12;  
 XX Best Local Similarity 100.0%; Pred. No. 1e+03;  
 XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 XX  
 XX 927 TTTATCCCTC 936  
 XX |||||  
 XX 11 TTTATCCCTC 2  
 XX  
 XX RESULT 698  
 XX ABI49907/c  
 XX ID ABI49907 standard; DNA; 12 BP.  
 XX AC ABI49907;  
 XX XX 22-FEB-2002 (first entry)  
 XX DE Oligonucleotide primer SEQ ID NO 349880 for detecting SNP TSC0046393.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 XX designed to detect single-nucleotide polymorphisms and cytosine  
 XX methylation status.  
 XX Claim 1; SEQ ID NO 349880; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 12 BP; 8 A; 2 C; 0 G; 2 T; 0 U; 0 Other;  
  
Query Match 13.7%; Score 10; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 944 TTGGTTTAAAT 953  
DB 10 TTGGTTTAAAT 1  
|||||  
|||||  
  
RESULT 699  
ABI30324/c  
ID ABI30324 standard; DNA; 12 BP.  
XX AC ABI30324;  
XX DT 22-FEB-2002 (first entry)  
XX DE Oligonucleotide primer SEQ ID NO 330297 for detecting SNP TSC0035440.  
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX OS Homo sapiens.  
XX PN WO200177384-A2.  
XX PD 18-OCT-2001.  
XX PF 06-APR-2001; 2001WO-IB000713.  
XX PR 07-APR-2000; 2000DE-01019173.  
XX PA (EPIG-) EPIGENOMICS AG.  
XX PI Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX Claim 1; SEQ ID NO 330297; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences  
XX

SQ Sequence 12 BP; 6 A; 0 C; 3 G; 3 T; 0 U; 0 Other;  
  
Query Match 13.7%; Score 10; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 926 TTTTATCCCT 935  
DB 11 TTTTATCCCT 2  
|||||  
|||||  
  
RESULT 700  
ABH96027/c  
ID ABH96027 standard; DNA; 12 BP.  
XX AC ABH96027;  
XX DT 22-FEB-2002 (first entry)  
XX DE Oligonucleotide primer SEQ ID NO 296020 for detecting SNP TSC0016856.  
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX OS Homo sapiens.  
XX PN WO200177384-A2.  
XX PD 18-OCT-2001.  
XX PF 06-APR-2001; 2001WO-IB000713.  
XX PR 07-APR-2000; 2000DE-01019173.  
XX PA (EPIG-) EPIGENOMICS AG.  
XX PI Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX Claim 1; SEQ ID NO 296020; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 12 BP; 6 A; 0 C; 3 G; 3 T; 0 U; 0 Other;  
  
Query Match 13.7%; Score 10; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 926 TTTTATCCCT 935  
DB 12 TTTTATCCCT 3  
|||||  
|||||  
  
RESULT 701  
ABI26799

ABI26799 standard; DNA; 12 BP.  
 ABI26799;  
 22-FEB-2002 (first entry)  
 Oligonucleotide primer SEQ ID NO 326772 for detecting SNP TSC0033272.  
 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 Homo sapiens.  
 WO200177384-A2.  
 18-OCT-2001.  
 06-APR-2001; 2001WO-IB000713.  
 07-APR-2000; 2000DE-01019173.  
 (EPIG-) EPIGENOMICS AG.  
 Olek A, Piepenbrock C, Berlin K;  
 WPI; 2001-657177/75.  
 Set of oligonucleotides, useful for diagnosis and cell typing, is  
 designed to detect single-nucleotide polymorphisms and cytosine  
 methylation status.  
 Claim 1; SEQ ID NO 326772; 29pp + Sequence Listing; German.  
 This invention describes novel oligonucleotide primers or peptide nucleic  
 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 and cytosine methylation status in chemically pretreated genomic DNA. The  
 oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 range of diseases including immune system, gastrointestinal, respiratory,  
 central nervous system, cardiovascular and metabolic disorders. The  
 oligomers are also used for detecting cell type differentiation. ABC00010  
 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073  
 represent the oligomers described in the invention. NOTE: The sequence  
 data for this patent did not form part of the printed specification, but  
 was obtained in electronic format from WIPO at  
 ftp.wipo.int/pub/published\_pct\_sequences  
 Sequence 12 BP; 3 A; 0 C; 1 G; 8 T; 0 U; 0 Other;  
 This invention describes novel oligonucleotide primers or peptide nucleic  
 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 and cytosine methylation status in chemically pretreated genomic DNA. The  
 oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 range of diseases including immune system, gastrointestinal, respiratory,  
 central nervous system, cardiovascular and metabolic disorders. The  
 oligomers are also used for detecting cell type differentiation. ABC00010  
 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073  
 represent the oligomers described in the invention. NOTE: The sequence  
 data for this patent did not form part of the printed specification, but  
 was obtained in electronic format from WIPO at  
 ftp.wipo.int/pub/published\_pct\_sequences  
 Sequence 12 BP; 3 A; 0 C; 1 G; 8 T; 0 U; 0 Other;  
 Query Match 13.7%; Score 10; DB 1; Length 12;  
 Best Local Similarity 100.0%; Pred. No. 1e+03;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 948 TTTAATGTCAT 957  
 |||||  
 3 TTTAATGTCAT 12  
 SULT 702  
 I56394/C  
 ABI56394 standard; DNA; 12 BP.  
 ABI56394;  
 22-FEB-2002 (first entry)  
 Oligonucleotide primer SEQ ID NO 356367 for detecting SNP TSC0009676.  
 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 Homo sapiens.

XX WO200177384-A2.  
 PN 18-OCT-2001.  
 PD 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 PF (EPIG-) EPIGENOMICS AG.  
 PR Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is  
 XX designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 FT  
 XX Claim 1; SEQ ID NO 356367; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX Sequence 12 BP; 9 A; 0 C; 2 G; 1 T; 0 U; 0 Other;  
 SQ Query Match 13.7%; Score 10; DB 1; Length 12;  
 Best Local Similarity 100.0%; Pred. No. 1e+03;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 906 CATTTTCCTT 915  
 |||||  
 DB 12 CATTTTCCTT 3  
 RESULT 703  
 ABI63850  
 ID ABI63850 standard; DNA; 12 BP.  
 XX AC ABI63850;  
 XX 22-FEB-2002 (first entry)  
 DT Oligonucleotide primer SEQ ID NO 363823 for detecting SNP TSC0054076.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 DE peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 OS WO200177384-A2.  
 PN 18-OCT-2001.  
 PD 06-APR-2001; 2001WO-IB000713.  
 PF 07-APR-2000; 2000DE-01019173.  
 PR (EPIG-) EPIGENOMICS AG.  
 PA Olek A, Piepenbrock C, Berlin K;  
 XX WPI



DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 363823; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 12 BP; 1 A; 2 C; 1 G; 8 T; 0 U; 0 Other;  
Query Match 13.7%; Score 10; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 906 CATTTCTTT 915  
DB 2 CATTTCTTT 11  
RESULT 704  
ABH69829/C  
ID ABH69829 standard; DNA; 12 BP.  
XX  
AC ABH69829;  
XX  
DT 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide primer SEQ ID NO 269806 for detecting SNP TSC0001888.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
XX Claim 1; SEQ ID NO 269806; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,

CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 12 BP; 6 A; 1 C; 0 G; 5 T; 0 U; 0 Other;  
Query Match 13.7%; Score 10; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 948 TTTAATGTAT 957  
DB 11 TTTAATGTAT 2  
RESULT 705  
ABI73953  
ID ABI73953 standard; DNA; 12 BP.  
XX  
AC ABI73953;  
XX  
DT 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide primer SEQ ID NO 373926 for detecting SNP TSC0060394.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
XX Claim 1; SEQ ID NO 373926; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 12 BP; 0 A; 7 C; 0 G; 5 T; 0 U; 0 Other;  
Query Match 13.7%; Score 10; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;



PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 PR 07-APR-2000; 2000DE-01019173.  
 XX  
 PA (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 DR WPI; 2001-657177/75.  
 XX  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 PS Claim 1; SEQ ID NO 303856; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 12 BP; 2 A; 0 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 13.7%; Score 10; DB 1; Length 12;  
 Best Local Similarity 100.0%; Pred. No. 1e+03;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 945 TGGTTTAATG 954  
 DQ 1 TGGTTTAATG 10  
 RESULT 709  
 ABI10334  
 ID ABI10334 standard; DNA; 12 BP.  
 XX  
 AC ABI10334;  
 XX  
 DT 22-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide primer SEQ ID NO 310307 for detecting SNP TSC0023910.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200177384-A2.  
 XX  
 PD 18-OCT-2001.  
 XX  
 PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 PR 07-APR-2000; 2000DE-01019173.  
 XX  
 PA (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 DR WPI; 2001-657177/75.  
 XX  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

XX  
 PS Claim 1; SEQ ID NO 310307; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 12 BP; 2 A; 3 C; 0 G; 7 T; 0 U; 0 Other;  
 Query Match 13.7%; Score 10; DB 1; Length 12;  
 Best Local Similarity 100.0%; Pred. No. 1e+03;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 905 TCATTTTCTT 914  
 DQ 2 TCATTTTCTT 11  
 RESULT 710  
 ABI68556  
 ID ABI68556 standard; DNA; 12 BP.  
 XX  
 AC ABI68556;  
 XX  
 DT 22-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide primer SEQ ID NO 368529 for detecting SNP TSC0057065.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200177384-A2.  
 XX  
 PD 18-OCT-2001.  
 XX  
 PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 PR 07-APR-2000; 2000DE-01019173.  
 XX  
 PA (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 DR WPI; 2001-657177/75.  
 XX  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 PS Claim 1; SEQ ID NO 368529; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but

```
1 was obtained in electronic format from WIPO at
2 ftp.wipo.int/pub/published_pct_sequences
3
4 Sequence 12 BP; 3 A; 0 C; 3 G; 6 T; 0 U; 0 Other;
5
6 Query Match 13.7%; Score 10; DB 1; Length 12;
7 Best Local Similarity 100.0%; Pred. No. 1e+03;
8 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
9
10 946 GCTTTAAATCT 955
11 |||||
12 1 GCTTTAAATCT 10
13
14 RESULT 711
15 H36452
16 ABI36452 standard; DNA; 12 BP.
17
18 ABI36452;
19
20 22-FEB-2002 (first entry)
21
22 Oligonucleotide primer SEQ ID NO 336425 for detecting SNP TSC0039353.
23
24 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
25 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
26 central nervous system; gastrointestinal; respiratory; immune; metabolic.
27
28 Homo sapiens.
29
30 WO200177384-A2.
31
32 18-OCT-2001.
33
34 06-APR-2001; 2001WO-IB0000713.
35
36 07-APR-2000; 2000DE-01019173.
37
38 (EPIG-) EPIGENOMICS AG.
39
40 Olek A, Piepenbrock C, Berlin K;
41
42 WPI; 2001-657177/75.
43
44 Set of oligonucleotides, useful for diagnosis and cell typing, is
45 designed to detect single-nucleotide polymorphisms and cytosine
46 methylation status.
47
48 Claim 1; SEQ ID NO 336425; 29pp + Sequence Listing; German.
49
50 This invention describes novel oligonucleotide primers or peptide nucleic
51 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
52 and cytosine methylation status in chemically pretreated genomic DNA. The
53 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
54 range of diseases including immune system, gastrointestinal, respiratory,
55 central nervous system, cardiovascular and metabolic disorders. The
56 oligomers are also used for detecting cell type differentiation. ABC00010
57 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
58 represent the oligomers described in the invention. NOTE: The sequence
59 data for this patent did not form part of the printed specification, but
60 was obtained in electronic format from WIPO at
61 ftp.wipo.int/pub/published_pct_sequences
62
63 Sequence 12 BP; 3 A; 0 C; 2 G; 7 T; 0 U; 0 Other;
64
65 Query Match 13.7%; Score 10; DB 1; Length 12;
66 Best Local Similarity 100.0%; Pred. No. 1e+03;
67 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
68
69 944 TTGGTTTAAAT 953
70 |||||
71 3 TTGGTTTAAAT 12
72
73 RESULT 712
74 ABH91718
75 ID ABH91718 standard; DNA; 12 BP.
76
77 XX
78 AC ABH91718;
79
80 XX
81 22-FEB-2002 (first entry)
82
83 XX
84 Oligonucleotide primer SEQ ID NO 291711 for detecting SNP TSC0014907.
85
86 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
87 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
88 central nervous system; gastrointestinal; respiratory; immune; metabolic.
89
90 Homo sapiens.
91
92 WO200177384-A2.
93
94 18-OCT-2001.
95
96 06-APR-2001; 2001WO-IB0000713.
97
98 07-APR-2000; 2000DE-01019173.
99
100 (EPIG-) EPIGENOMICS AG.
101
102 Olek A, Piepenbrock C, Berlin K;
103
104 WPI; 2001-657177/75.
105
106 Set of oligonucleotides, useful for diagnosis and cell typing, is
107 designed to detect single-nucleotide polymorphisms and cytosine
108 methylation status.
109
110 Claim 1; SEQ ID NO 291711; 29pp + Sequence Listing; German.
111
112 This invention describes novel oligonucleotide primers or peptide nucleic
113 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
114 and cytosine methylation status in chemically pretreated genomic DNA. The
115 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
116 range of diseases including immune system, gastrointestinal, respiratory,
117 central nervous system, cardiovascular and metabolic disorders. The
118 oligomers are also used for detecting cell type differentiation. ABC00010
119 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
120 represent the oligomers described in the invention. NOTE: The sequence
121 data for this patent did not form part of the printed specification, but
122 was obtained in electronic format from WIPO at
123 ftp.wipo.int/pub/published_pct_sequences
124
125 Sequence 12 BP; 1 A; 4 C; 0 G; 7 T; 0 U; 0 Other;
126
127 Query Match 13.7%; Score 10; DB 1; Length 12;
128 Best Local Similarity 100.0%; Pred. No. 1e+03;
129 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
130
131 QY 925 CTTTATATCCC 934
132 |||||
133 Db 3 CTTTATATCCC 12
134
135 RESULT 713
136 ABC85748/c
137 ID ABC85748 standard; DNA; 13 BP.
138
139 XX
140 AC ABC85748;
141
142 XX
143 21-FEB-2002 (first entry)
144
145 XX
146 Oligonucleotide SEQ ID NO 85765 for detecting SNP TSC0021549.
147
148 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
149 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
```

KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 OS WO200177384-A2.  
 PN 18-OCT-2001.  
 PD 06-APR-2001; 2001WO-IB000713.  
 PF 07-APR-2000; 2000DE-01019173.  
 PR (EPIG-) EPIGENOMICS AG.  
 PA Olek A, Piepenbrock C, Berlin K;  
 PI WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 85765; 29pp + Sequence Listing; German.  
 PS This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 8 A; 0 C; 2 G; 3 T; 0 U; 0 Other;  
 Query Match 13.7%; Score 10; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 1e+03;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 906 CATTTCTCTT 915  
 DB 11 CATTTCTCTT 2  
 RESULT 714  
 ABF38703  
 ID ABF38703 standard; DNA; 13 BP.  
 XX  
 AC ABF38703;  
 XX  
 DT 21-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide SEQ ID NO 138700 for detecting SNP TSC0034750.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 FN WO200177384-A2.  
 XX  
 PD 18-OCT-2001.  
 XX  
 PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 PR 07-APR-2000; 2000DE-01019173.  
 XX  
 PA (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 138700; 29pp + Sequence Listing; German.  
 PS This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 2 A; 4 C; 0 G; 6 T; 0 U; 1 Other;  
 Query Match 13.7%; Score 10; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 1e+03;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 925 CTTTATCC 934  
 DB 2 CTTTATCC 11  
 RESULT 715  
 ABH04494  
 ID ABH04494 standard; DNA; 13 BP.  
 XX  
 AC ABH04494;  
 XX  
 DT 22-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide SEQ ID NO 204471 for detecting SNP TSC0050159.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 FN WO200177384-A2.  
 XX  
 PD 18-OCT-2001.  
 XX  
 PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 PR 07-APR-2000; 2000DE-01019173.  
 XX  
 PA (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 DR WPI; 2001-657177/75.  
 XX  
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 204471; 29pp + Sequence Listing; German.  
 PS This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 947 GTTTAATGTA 956  
DB 2 GTTTAATGTA 11  
|||||

RESULT 716

ABF80945 standard; DNA; 13 BP.

ABF80945;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 180942 for detecting SNP TSC0044777.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 180942; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 3 A; 6 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 929 TATCCCTCCT 938  
DB 2 TATCCCTCCT 11  
|||||

RESULT 717

ABC45854 standard; DNA; 13 BP.

ABC45854;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 45871 for detecting SNP TSC0013320.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 45871; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 947 GTTTAATGTA 956  
DB 1 GTTTAATGTA 10  
|||||

RESULT 718

ABC47695 standard; DNA; 13 BP.

XX

AC ABC47695;  
XX  
DT 21-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 47712 for detecting SNP TSC0013678.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
CS Homo sapiens.  
XX  
PN WO200177384-A2.  
XX  
XX 18-OCT-2001.  
PD  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPiG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 47712; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 3 A; 3 C; 0 G; 7 T; 0 U; 0 Other;  
XX  
Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
CY 905 TCATTTCCTT 914  
DB : |||||  
1 TCATTTCCTT 10  
XX  
RESULT 719  
ABF02349  
ID ABF02349 standard; DNA; 13 BP.  
XX  
AC ABF02349;  
XX  
DT 21-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 102346 for detecting SNP TSC0025524.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
CS Homo sapiens.  
XX  
PN WO200177384-A2.  
XX

XX 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPiG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 102346; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 1 A; 2 C; 0 G; 9 T; 0 U; 1 Other;  
XX  
Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 83.3%; Pred. No. 1e+03;  
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
XX  
CY 904 GTCATTTCCTT 915  
DB : |||||  
1 RTTATTTCCTT 12  
XX  
RESULT 720  
ABF04505/C  
ID ABF04505 standard; DNA; 13 BP.  
XX  
AC ABF04505;  
XX  
DT 21-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 104502 for detecting SNP TSC0026125.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
PN WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPiG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 104502; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. The -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 8 A; 3 C; 1 G; 0 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 83.3%; Pred. No. 1e+03; Mismatches 1; Indels 0; Gaps 0;

908 TTTTCTTTGGTC 919  
|||||  
12 TTTTCTTTGGTY 1

RESULT 721  
3C54943/C  
ABC54943 standard; DNA; 13 BP.

ABC54943;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 54960 for detecting SNP TSC0015048.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 54960; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010

-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 8 A; 2 C; 0 G; 2 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 83.3%; Pred. No. 1e+03; Mismatches 1; Indels 0; Gaps 0;

947 GTTAAATGATC 958  
|||||  
12 GTTAAATGATY 1

RESULT 722  
ABF09013/C  
ID ABF09013 standard; DNA; 13 BP.

AC ABF09013;

XX 21-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 109010 for detecting SNP TSC0027286.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 109010; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 9 A; 1 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03; Mismatches 0; Indels 0; Gaps 0;

948 TTTAAATGATC 957



```

DQ      11 TTTAATGTAT 2
|||||
RESULT 723
ID      ABC59029 standard; DNA; 13 BP.
XX
XX      AC      ABC59029;
XX
XX      21-FEB-2002 (first entry)
XX
XX      Oligonucleotide SEQ ID NO 59046 for detecting SNP TSC0015825.
XX
XX      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX      peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX      central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX      Homo sapiens.
XX
XX      WO200177384-A2.
XX
XX      18-OCT-2001.
XX
XX      06-APR-2001; 2001WO-IB000713.
XX
XX      07-APR-2000; 2000DE-01019173.
XX
XX      (EPIG-) EPIGENOMICS AG.
XX
XX      Olek A, Piepenbrock C, Berlin K;
XX
XX      WPI; 2001-657177/75.
XX
XX      Set of oligonucleotides, useful for diagnosis and cell typing, is
XX      designed to detect single-nucleotide polymorphisms and cytosine
XX      methylation status.
XX
XX      Claim 1; SEQ ID NO 59046; 29pp + Sequence Listing; German.
XX
XX      This invention describes novel oligonucleotide primers or peptide nucleic
XX      acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX      and cytosine methylation status in chemically pretreated genomic DNA. The
XX      oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX      range of diseases including immune system, gastrointestinal, respiratory,
XX      central nervous system, cardiovascular and metabolic disorders. The
XX      oligomers are also used for detecting cell type differentiation. ABC00010
XX      -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
XX      represent the oligomers described in the invention. NOTE: The sequence
XX      data for this patent did not form part of the printed specification, but
XX      was obtained in electronic format from WIPO at
XX      ftp.wipo.int/pub/published_pct_sequences
XX
XX      Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
XX
XX      Query Match      13.7%; Score 10; DB 1; Length 13;
XX      Best Local Similarity 100.0%; Pred. No. 1e+03;
XX      Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX      QY      948 TTTAATGTAT 957
XX      |||||
XX      DB      11 TTTAATGTAT 2
XX
XX      RESULT 724
XX      ABC63810/c
XX      ID      ABC63810 standard; DNA; 13 BP.
XX
XX      AC      ABC63810;
XX
XX      21-FEB-2002 (first entry)
XX
XX      Oligonucleotide SEQ ID NO 63827 for detecting SNP TSC0016855.

```

```

XX
XX      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX      peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX      central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX      Homo sapiens.
XX
XX      WO200177384-A2.
XX
XX      18-OCT-2001.
XX
XX      06-APR-2001; 2001WO-IB000713.
XX
XX      07-APR-2000; 2000DE-01019173.
XX
XX      (EPIG-) EPIGENOMICS AG.
XX
XX      Olek A, Piepenbrock C, Berlin K;
XX
XX      WPI; 2001-657177/75.
XX
XX      Set of oligonucleotides, useful for diagnosis and cell typing, is
XX      designed to detect single-nucleotide polymorphisms and cytosine
XX      methylation status.
XX
XX      Claim 1; SEQ ID NO 63827; 29pp + Sequence Listing; German.
XX
XX      This invention describes novel oligonucleotide primers or peptide nucleic
XX      acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX      and cytosine methylation status in chemically pretreated genomic DNA. The
XX      oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX      range of diseases including immune system, gastrointestinal, respiratory,
XX      central nervous system, cardiovascular and metabolic disorders. The
XX      oligomers are also used for detecting cell type differentiation. ABC00010
XX      -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
XX      represent the oligomers described in the invention. NOTE: The sequence
XX      data for this patent did not form part of the printed specification, but
XX      was obtained in electronic format from WIPO at
XX      ftp.wipo.int/pub/published_pct_sequences
XX
XX      Sequence 13 BP; 7 A; 0 C; 3 G; 3 T; 0 U; 0 Other;
XX
XX      Query Match      13.7%; Score 10; DB 1; Length 13;
XX      Best Local Similarity 100.0%; Pred. No. 1e+03;
XX      Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX      QY      926 TTTTATCCCT 935
XX      |||||
XX      DB      12 TTTTATCCCT 3
XX
XX      RESULT 725
XX      ABF45133/c
XX      ID      ABF45133 standard; DNA; 13 BP.
XX
XX      AC      ABF45133;
XX
XX      21-FEB-2002 (first entry)
XX
XX      Oligonucleotide SEQ ID NO 145130 for detecting SNP TSC0036516.
XX
XX      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX      peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX      central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX      Homo sapiens.
XX
XX      WO200177384-A2.
XX
XX      18-OCT-2001.
XX
XX      06-APR-2001; 2001WO-IB000713.

```

07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
Claim 1; SEQ ID NO 145130; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
Sequence 13 BP; 8 A; 2 C; 1 G; 1 T; 0 U; 1 Other;  
Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 83.3%; Pred. No. 1e+03;  
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
920 TTTCGCTTTTAT 931  
|||||  
12 TTTCGCTTTTAY 1  
SULT 726  
H20194/C  
ABH20194 standard; DNA; 13 BP.  
ABH20194;  
22-FEB-2002 (first entry)  
Oligonucleotide SEQ ID NO 220171 for detecting SNP TSC0053577.  
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.  
Homo sapiens.  
WO200177384-A2.  
18-OCT-2001.  
06-APR-2001; 2001WO-IB000713.  
07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
Claim 1; SEQ ID NO 220171; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
XX Sequence 13 BP; 7 A; 0 C; 5 G; 1 T; 0 U; 0 Other;  
SQ Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 925 CTTTATCCC 934  
Db |||||  
13 CTTTATCCC 4  
RESULT 727  
ABH03510/C  
ID ABH03510 standard; DNA; 13 BP.  
XX AC ABH03510;  
XX DT 22-FEB-2002 (first entry)  
XX DE Oligonucleotide SEQ ID NO 203487 for detecting SNP TSC0049964.  
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX OS Homo sapiens.  
XX PN WO200177384-A2.  
XX PD 18-OCT-2001.  
XX PF 06-APR-2001; 2001WO-IB000713.  
XX PR 07-APR-2000; 2000DE-01019173.  
XX PA (EPIG-) EPIGENOMICS AG.  
XX PI Olek A, Piepenbrock C, Berlin K;  
XX DR WPI; 2001-657177/75.  
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
XX PS Claim 1; SEQ ID NO 203487; 29pp + Sequence Listing; German.  
XX CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

```
XX
SQ Sequence 13 BP; 9 A; 0 C; 3 G; 1 T; 0 U; 0 Other;

Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 905 TCATTTCCTT 914
Db 10 TCATTTCCTT 1

RESULT 728
ABH06011
ID ABH06011 standard; DNA; 13 BP.
XX
AC ABH06011;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 205988 for detecting SNP TSC0050474.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
FN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR MPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 205988; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 5 C; 0 G; 5 T; 0 U; 0 Other;

Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 935 TCCTCTTCAT 944
Db 3 TCCTCTTCAT 12

RESULT 729
```

```
ABH32116
ID ABH32116 standard; DNA; 13 BP.
XX
AC ABH32116;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 232093 for detecting SNP TSC0056602.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
FN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR MPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 232093; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 1 G; 8 T; 0 U; 0 Other;

Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 948 TTTAATGTAT 957
Db 2 TTTAATGTAT 11

RESULT 730
ABF82791/c
ID ABF82791 standard; DNA; 13 BP.
XX
AC ABF82791;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 182788 for detecting SNP TSC0045166.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
```

```

XX Homo sapiens.
DR WO200177384-A2.
PT 18-OCT-2001.
PT 06-APR-2001; 2001WO-IB0000713.
PS 07-APR-2000; 2000DE-01019173.
XX (EPiG-) EPIGENOMICS AG.
CC Olek A, Piepenbrock C, Berlin K;
CC WPI; 2001-657177/75.
CC Set of oligonucleotides, useful for diagnosis and cell typing, is
CC designed to detect single-nucleotide polymorphisms and cytosine
CC methylation status.
CC Claim 1; SEQ ID NO 182788; 29pp + Sequence Listing; German.
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 7 A; 2 C; 1 G; 2 T; 0 U; 1 Other;
XX Query Match 13.7%; Score 10; DB 1; Length 13;
XX Best Local Similarity 83.3%; Pred. No. 1e+03;
XX Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
/ 920 TTGGCTTTTAT 931
/ ||||| |||||
/ 12 TTGGCTTTTAT 1
304939/3
) ABC44939 standard; DNA; 13 BP.
) ABC44939;
) 21-FEB-2002 (first entry)
) Oligonucleotide SEQ ID NO 44956 for detecting SNP TSC0013151.
) SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
) peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
) central nervous system; gastrointestinal; respiratory; immune; metabolic.
) Homo sapiens.
) WO200177384-A2.
) 18-OCT-2001.
) 06-APR-2001; 2001WO-IB0000713.
) 07-APR-2000; 2000DE-01019173.
) (EPiG-) EPIGENOMICS AG.
) Olek A, Piepenbrock C, Berlin K;

```

```

XX WPI; 2001-657177/75.
DR Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 44956; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 6 A; 2 C; 0 G; 4 T; 0 U; 1 Other;
XX Query Match 13.7%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 947 GTTTAATGTA 956
DB 13 GTTTAATGTA 4
RESULT 732
ABC20523
ID ABC20523 standard; DNA; 13 BP.
XX ABC20523;
XX 20-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 20540 for detecting SNP TSC0004187.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB0000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPiG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 20540; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 6 A; 2 C; 0 G; 4 T; 0 U; 1 Other;

```

CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 1 A; 6 C; 0 G; 5 T; 0 U; 1 Other;  
 Query Match 13.7%; Score 10; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 1e+03;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 935 TCCTCTTCAT 944  
 DB 2 TCCTCTTCAT 11  
 RESULT 733  
 ABC98228  
 ID ABC98228 standard; DNA; 13 BP.  
 AC  
 AC ABC98228;  
 XX  
 XX 21-FEB-2002 (first entry)  
 DT  
 XX Oligonucleotide SEQ ID NO 98245 for detecting SNP TSC0024404.  
 DE  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 CS Homo sapiens.  
 XX  
 XX WO200177384-A2.  
 PV  
 XX 18-OCT-2001.  
 PD  
 XX 06-APR-2001; 2001WO-IB000713.  
 PF  
 XX 07-APR-2000; 2000DE-01019173.  
 PR  
 XX (EPIG-) EPIGENOMICS AG.  
 PA  
 XX Olek A, Piepenbrock C, Berlin K;  
 PI  
 XX WPI; 2001-657177/75.  
 DR  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 PS  
 XX Claim 1; SEQ ID NO 98245; 29pp + Sequence Listing; German.  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 5 A; 0 C; 1 G; 7 T; 0 U; 0 Other;  
 Query Match 13.7%; Score 10; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 1e+03;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 948 TTTAATGTAT 957  
 DB 1 TTTAATGTAT 10  
 RESULT 734  
 ABC26065  
 ID ABC26065 standard; DNA; 13 BP.  
 AC  
 AC ABC26065;  
 XX  
 XX 20-FEB-2002 (first entry)  
 DT  
 XX Oligonucleotide SEQ ID NO 26082 for detecting SNP TSC0006747.  
 DE  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO200177384-A2.  
 PN  
 XX 18-OCT-2001.  
 PD  
 XX 06-APR-2001; 2001WO-IB000713.  
 PF  
 XX 07-APR-2000; 2000DE-01019173.  
 PR  
 XX (EPIG-) EPIGENOMICS AG.  
 PA  
 XX Olek A, Piepenbrock C, Berlin K;  
 PI  
 XX WPI; 2001-657177/75.  
 DR  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 PS  
 XX Claim 1; SEQ ID NO 26082; 29pp + Sequence Listing; German.  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 2 A; 3 C; 0 G; 8 T; 0 U; 0 Other;  
 Query Match 13.7%; Score 10; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 1e+03;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 906 CATTTTCTTT 915  
 DB 3 CATTTTCTTT 12  
 RESULT 735  
 ABC03476/c  
 ID ABC03476 standard; DNA; 13 BP.  
 AC  
 AC ABC03476;  
 XX

```
20-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 3467 for detecting SNP TSC0001294.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 3467; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 9 A; 0 C; 2 G; 2 T; 0 U; 0 Other;
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 9 A; 0 C; 2 G; 2 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03; 0; Indels 0; Gaps 0;
Matches 10; Conservative 0; Mismatches 0;
906 CATTTCCTTT 915
13 CATTTCCTTT 4
RESULT 736
IC54942
ABC54942 standard; DNA; 13 BP.
ABC54942;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 54959 for detecting SNP TSC0015048.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
```

```
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 54959; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 2 A; 0 C; 2 G; 8 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03; 1; Indels 0; Gaps 0;
Matches 10; Conservative 1; Mismatches 1;
QY 947 GTTTAATGTATC 958
DB 2 GTTTAATGTATY 13
RESULT 737
ABF99923/c
ID ABF99923 standard; DNA; 13 BP.
XX
AC ABF99923;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 199920 for detecting SNP TSC0049189.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
```

PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 199920; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 9 A; 3 C; 0 G; 0 T; 0 U; 1 Other;  
Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 83.3%; Pred. No. 1e+03; Mismatches 1; Indels 0; Gaps 0;  
Matches 10; Conservative 1;  
QY 913 TTGCTTTGC 924  
DB 12 TTGCTTTG 1  
RESULT 738  
ABH25091  
ID ABH25091 standard; DNA; 13 BP.  
XX  
AC ABH25091;  
XX  
JT 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 225068 for detecting SNP TSC0054876.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
PN WO200177384-A2.  
XX  
PJ 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 225068; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence

CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 4 A; 4 C; 1 G; 4 T; 0 U; 0 Other;  
Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03; Mismatches 0; Indels 0; Gaps 0;  
Matches 10; Conservative 0;  
QY 955 TATCGCTACC 964  
DB 4 TATCGCTACC 13  
RESULT 739  
ABF80420  
ID ABF80420 standard; DNA; 13 BP.  
XX  
AC ABF80420;  
XX  
DT 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 180417 for detecting SNP TSC0007140.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
PN WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 180417; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;  
Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03; Mismatches 0; Indels 0; Gaps 0;  
Matches 10; Conservative 0;  
QY 948 TTTAATGTAT 957  
DB 1 TTTAATGTAT 10

```

>SULT 740
>H06010/c
> ) ABH06010 standard; DNA; 13 BP.
> )
> ) ABH06010;
> )
> ) 22-FEB-2002 (first entry)
> )
> ) Oligonucleotide SEQ ID NO 205987 for detecting SNP TSC0050474.
> )
> ) SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
> ) peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
> ) central nervous system; gastrointestinal; respiratory; immune; metabolic.
> )
> ) Homo sapiens.
> )
> ) WO200177384-A2.
> )
> ) 18-OCT-2001.
> )
> ) 06-APR-2001; 2001WO-IB000713.
> )
> ) 07-APR-2000; 2000DE-01019173.
> )
> ) (EPITG-) EPIGENOMICS AG.
> )
> ) Olek A, Piepenbrock C, Berlin K;
> )
> ) WPI; 2001-657177/75.
> )
> ) Set of oligonucleotides, useful for diagnosis and cell typing, is
> ) designed to detect single-nucleotide polymorphisms and cytosine
> ) methylation status.
> )
> ) Claim 1; SEQ ID NO 205987; 29pp + Sequence Listing; German.
> )
> ) This invention describes novel oligonucleotide primers or peptide nucleic
> ) acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
> ) and cytosine methylation status in chemically pretreated genomic DNA. The
> ) oligonucleotides are used for diagnosis and/or prognosis of cancer and a
> ) range of diseases including immune system, gastrointestinal, respiratory,
> ) central nervous system, cardiovascular and metabolic disorders. The
> ) oligomers are also used for detecting cell type differentiation. ABC00010
> ) -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
> ) represent the oligomers described in the invention. NOTE: The sequence
> ) data for this patent did not form part of the printed specification, but
> ) was obtained in electronic format from WIPO at
> ) ftp.wipo.int/pub/published_pct_sequences
> )
> ) Sequence 13 BP; 5 A; 0 C; 5 G; 3 T; 0 U; 0 Other;
> )
> ) Query Match 13.7%; Score 10; DB 1; Length 13;
> ) Best Local Similarity 100.0%; Pred. No. 1e+03;
> ) Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
> )
> ) 935 TCCTCTTCAT 944
> ) |||||
> ) 11 TCCTCTTCAT 2
> )
> ) ABH32117 standard; DNA; 13 BP.
> )
> ) ABH32117;
> )
> ) 22-FEB-2002 (first entry)
> )
> ) Oligonucleotide SEQ ID NO 232094 for detecting SNP TSC0056602.
> )
> ) SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

```

```

KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPITG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 232094; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 8 A; 1 C; 0 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 13.7%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 948 TTTAATGAT 957
XX |||||
XX Db 12 TTAAIGTAT 3
XX
>RESULT 742
>ABF61637/c
>ID ABF61637 standard; DNA; 13 BP.
>XX
>XX ABF61637;
>AC
>XX
>XX 22-FEB-2002 (first entry)
>DT
>XX
>XX Oligonucleotide SEQ ID NO 161634 for detecting SNP TSC0040687.
>DE
>XX
>XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
>KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
>KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
>XX
>XX Homo sapiens.
>XX
>XX WO200177384-A2.
>PN
>XX
>XX 18-OCT-2001.
>PD
>XX
>XX 06-APR-2001; 2001WO-IB000713.
>PF
>XX
>XX 07-APR-2000; 2000DE-01019173.
>XX

```



PA (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 XX Claim 1; SEQ ID NO 161634; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 6 A; 2 C; 0 G; 5 T; 0 U; 0 Other;  
 Query Match 13.7%; Score 10; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 1e+03;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 947 GTTTAAATGTA 956  
 Db 12 GTTTAAATGTA 3  
 RESULT 743  
 ABH59074/C  
 ID ABH59074 standard; DNA; 13 BP.  
 AC ABH59074;  
 DT 22-FEB-2002 (first entry)  
 DE Oligonucleotide SEQ ID NO 259051 for detecting SNP TSC0007540.  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 CS WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 XX Claim 1; SEQ ID NO 259051; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic

CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 6 A; 0 C; 1 G; 5 T; 0 U; 1 Other;  
 Query Match 13.7%; Score 10; DB 1; Length 13;  
 Best Local Similarity 83.3%; Pred. No. 1e+03;  
 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
 QY 947 GTTTAAATGTA 958  
 Db 13 RTTTAATATATC 2  
 RESULT 744  
 ABC98229/C  
 ID ABC98229 standard; DNA; 13 BP.  
 AC ABC98229;  
 XX 21-FEB-2002 (first entry)  
 DE Oligonucleotide SEQ ID NO 98246 for detecting SNP TSC0024404.  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 CS WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 XX Claim 1; SEQ ID NO 98246; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 7 A; 1 C; 0 G; 5 T; 0 U; 0 Other;

```

Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

/ 948 TTTAATGTTAT 957
) 13 TTTAATGTTAT 4
|||||
|||||

RESULT 745
IC64096
) ABC64096 standard; DNA; 13 BP.
) ABC64096;
) 21-FEB-2002 (first entry)
) Oligonucleotide SEQ ID NO 64113 for detecting SNP TSC0016920.
) SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
) peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
) central nervous system; gastrointestinal; respiratory; immune; metabolic.
) Homo sapiens.
) WO200177384-A2.
) 18-OCT-2001.
) 06-APR-2001; 2001WO-IB000713.
) 07-APR-2000; 2000DE-01019173.
) (EPiG-) EPIGENOMICS AG.
) Olek A, Piepenbrock C, Berlin K;
) WPI; 2001-657177/75.
) Set of oligonucleotides, useful for diagnosis and cell typing, is
) designed to detect single-nucleotide polymorphisms and cytosine
) methylation status.
) Claim 1; SEQ ID NO 64113; 29pp + Sequence Listing; German.
) This invention describes novel oligonucleotide primers or peptide nucleic
) acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
) and cytosine methylation status in chemically pretreated genomic DNA. The
) oligonucleotides are used for diagnosis and/or prognosis of cancer and a
) range of diseases including immune system, gastrointestinal, respiratory,
) central nervous system, cardiovascular and metabolic disorders. The
) oligomers are also used for detecting cell type differentiation. ABC00010
) -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
) represent the oligomers described in the invention. NOTE: The sequence
) data for this patent did not form part of the printed specification, but
) was obtained in electronic format from WIPO at
) ftp.wipo.int/pub/published_pct_sequences
) Sequence 13 BP; 5 A; 0 C; 2 G; 6 T; 0 U; 0 Other;
) This invention describes novel oligonucleotide primers or peptide nucleic
) acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
) and cytosine methylation status in chemically pretreated genomic DNA. The
) oligonucleotides are used for diagnosis and/or prognosis of cancer and a
) range of diseases including immune system, gastrointestinal, respiratory,
) central nervous system, cardiovascular and metabolic disorders. The
) oligomers are also used for detecting cell type differentiation. ABC00010
) -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
) represent the oligomers described in the invention. NOTE: The sequence
) data for this patent did not form part of the printed specification, but
) was obtained in electronic format from WIPO at
) ftp.wipo.int/pub/published_pct_sequences
) Sequence 13 BP; 5 A; 0 C; 2 G; 6 T; 0 U; 0 Other;

Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

/ 943 ATTGTTTAA 952
) 3 ATTGTTTAA 12
|||||
|||||

RESULT 746
IC64097/c
) ABC64097 standard; DNA; 13 BP.

```

```

XX ABC64097;
XX AC
XX DT 21-FEB-2002 (first entry)
XX XX
XX DE Oligonucleotide SEQ ID NO 64114 for detecting SNP TSC0016920.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX XX WO200177384-A2.
XX XX 18-OCT-2001.
XX XX 06-APR-2001; 2001WO-IB000713.
XX XX 07-APR-2000; 2000DE-01019173.
XX XX (EPiG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 64114; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX XX Sequence 13 BP; 6 A; 2 C; 0 G; 5 T; 0 U; 0 Other;
XX Query Match      13.7%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 943 ATTGTTTAA 952
DB 11 ATTGTTTAA 2
|||||
|||||

RESULT 747
ABF25028
ID ABF25028 standard; DNA; 13 BP.
XX XX
XX AC ABF25028;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 125025 for detecting SNP TSC0031242.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX XX

```



oligomers are also used for detecting cell type differentiation. ABC00010  
-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 1 A; 1 C; 2 G; 8 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;

Best Local Similarity 83.3%; Pred. No. 1e+03;

Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

920 TTGGCTTTTAT 931

|||||

2 TTGGCTTTTAY 13

RESULT 750

ABF99922

ABF99922 standard; DNA; 13 BP.

ABF99922;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 199919 for detecting SNP TSC0049189.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

Claim 1; SEQ ID NO 199919; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 0 A; 0 C; 3 G; 9 T; 0 U; 1 Other;

Query Match

Best Local Similarity 13.7%; Score 10; DB 1; Length 13;

Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 913 TTGGTCTTTGC 924

|||||

2 TTGGTCTTTGY 13

RESULT 751

ABH02153

ABH02153 standard; DNA; 13 BP.

AC ABH02153;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 202130 for detecting SNP TSC0049691.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

Claim 1; SEQ ID NO 202130; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 2 A; 2 C; 0 G; 9 T; 0 U; 0 Other;

Query Match

Best Local Similarity 13.7%; Score 10; DB 1; Length 13;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 906 CATTTCTTT 915

|||||

1 CATTTCTTT 10

RESULT 752

ABH04332/c

ABH04332 standard; DNA; 13 BP.

AC ABH04332;

22-FEB-2002 (first entry)

XX

DE Oligonucleotide SEQ ID NO 204309 for detecting SNP TSC0050117.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
CS Homo sapiens.  
XX  
EN WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PP 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 204309; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 8 A; 0 C; 2 G; 3 T; 0 U; 0 Other;  
  
Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 905 TCATTTCCTT 914  
DB 11 TCATTTCCTT 2  
  
RESULT 753  
ABF83110/C  
ID ABF83110 standard; DNA; 13 BP.  
XX  
AC ABF83110;  
XX  
CT 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 183107 for detecting SNP TSC0000589.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
CS Homo sapiens.  
XX  
EN WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PP 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.  
PR (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 183107; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 6 A; 0 C; 7 G; 0 T; 0 U; 0 Other;  
  
Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 931 TCCCTCTCTCT 940  
DB 13 TCCCTCTCTCT 4  
  
RESULT 754  
ABH47963/C  
ID ABH47963 standard; DNA; 13 BP.  
XX  
AC ABH47963;  
XX  
DT 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 247940 for detecting SNP TSC0009360.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
EN WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PP 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC000010-ABSC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI92073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

```
RESULT 757
ABC93984
ID ABC93984 standard; DNA; 13 BP.
XX AC
XX ABC93984;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 94001 for detecting SNP TSC0023487.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
FN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
XX
Claim 1; SEQ ID NO 94001; 29pp + Sequence Listing; German.
XX
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 1 G; 8 T; 0 U; 0 Other;
XX
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 948 TTTAATGCTAT 957
Db 4 TTTAATGCTAT 13
XX
RESULT 758
ABC93985/c
ID ABC93985 standard; DNA; 13 BP.
XX AC
XX ABC93985;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 94002 for detecting SNP TSC0023487.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
```

```
XX OS Homo sapiens.
XX FN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
XX Claim 1; SEQ ID NO 94002; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 8 A; 1 C; 0 G; 4 T; 0 U; 0 Other;
XX
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 948 TTTAATGCTAT 957
Db 10 TTTAATGCTAT 1
XX
RESULT 759
ABF01976
ID ABF01976 standard; DNA; 13 BP.
XX AC ABF01976;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 101973 for detecting SNP TSC0025398.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
FN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
```

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 101973; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 4 A; 0 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03; Indels 0; Gaps 0;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

948 TTTAATGTAT 957

1 TTTAATGTAT 10

RESULT 760

ABF94202  
ABF94202 standard; DNA; 13 BP.

ABF94202;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 194199 for detecting SNP TSC0047758.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 194199; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The

oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 4 A; 0 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03; Indels 0; Gaps 0;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

948 TTTAATGTAT 957

2 TTTAATGTAT 11

RESULT 761

ABF97925  
ID ABF97925 standard; DNA; 13 BP.

AC ABF97925;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 197922 for detecting SNP TSC0048708.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 197922; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 4 A; 4 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;



Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 924 CCTTTATCC 933  
D5 1 CCTTTATCC 10  
|||||

RESULT 762  
ABF80944/C  
ID ABF80944 standard; DNA; 13 BP.  
XX AC ABF80944;  
XX  
XX  
DT 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 180941 for detecting SNP TSC0044777.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
OS  
XX WO200177384-A2.  
PN  
XX  
XX 18-OCT-2001.  
PD  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
PP  
XX  
PR 07-APR-2000; 2000DE-01019173.  
PX  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
PI  
XX  
XX WPI; 2001-657177/75.  
DR  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
PT  
XX  
XX Claim 1; SEQ ID NO 180941; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX  
SQ Sequence 13 BP; 4 A; 0 C; 6 G; 3 T; 0 U; 0 Other;  
Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CY 929 TATCCCTCCT 938  
D5 12 TATCCCTCCT 3  
|||||

RESULT 763  
ABF83111  
ID ABF83111 standard; DNA; 13 BP.  
XX  
XX  
XX AC ABF83111;

XX  
DT 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 183108 for detecting SNP TSC0000589.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
OS  
XX WO200177384-A2.  
PN  
XX  
XX 18-OCT-2001.  
PD  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
PP  
XX  
PR 07-APR-2000; 2000DE-01019173.  
PX  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
PI  
XX  
XX WPI; 2001-657177/75.  
DR  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
PT  
XX  
XX Claim 1; SEQ ID NO 183108; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX  
SQ Sequence 13 BP; 0 A; 7 C; 0 G; 6 T; 0 U; 0 Other;  
Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 931 TCCCTCCTCT 940  
D5 1 TCCCTCCTCT 10  
|||||

RESULT 764  
ABC19220  
ID ABC19220 standard; DNA; 13 BP.  
XX  
XX  
XX AC ABC19220;  
XX  
XX  
DT 20-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 19237 for detecting SNP TSC0004017.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
OS  
XX WO200177384-A2.  
PN  
XX



CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;  
Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 948 TTTAATGTAT 957  
|||||  
DB 3 TTTAATGTAT 12  
RESULT 767  
ABC35309  
ID ABC35309 standard; DNA; 13 BP.  
AC ABC35309;  
XX  
DT 20-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 35326 for detecting SNP TSC0011192.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
PN W0200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 35326; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 3 A; 5 C; 0 G; 4 T; 0 U; 1 Other;  
Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 83.3%; Pred. No. 1e+03;  
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
CY 923 GCCTTTTATCCC 934  
:|||||

DB 1 RCTATTATCCC 12  
RESULT 768  
ABC85749  
ID ABC85749 standard; DNA; 13 BP.  
XX  
AC ABC85749;  
XX  
DT 21-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 85766 for detecting SNP TSC0021549.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
PN W0200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 85766; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 3 A; 2 C; 0 G; 8 T; 0 U; 0 Other;  
Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 906 CATTTCTTT 915  
|||||  
DB 3 CATTTCTTT 12  
RESULT 769  
ABC86878  
ID ABC86878 standard; DNA; 13 BP.  
XX  
AC ABC86878;  
XX  
DT 21-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 86895 for detecting SNP TSC0021828.  
XX

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 Homo sapiens.  
 WO200177384-A2.  
 18-OCT-2001.  
 06-APR-2001; 2001WO-IB000713.  
 07-APR-2000; 2000DE-01019173.  
 (EPIG-) EPIGENOMICS AG.  
 Olek A, Piepenbrock C, Berlin K;  
 WPI; 2001-657177/75.  
 Set of oligonucleotides, useful for diagnosis and cell typing, is  
 designed to detect single-nucleotide polymorphisms and cytosine  
 methylation status.  
 Claim 1; SEQ ID NO 86895; 29pp + Sequence Listing; German.  
 This invention describes novel oligonucleotide primers or peptide nucleic  
 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 and cytosine methylation status in chemically pretreated genomic DNA. The  
 oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 range of diseases including immune system, gastrointestinal, respiratory,  
 central nervous system, cardiovascular and metabolic disorders. The  
 oligomers are also used for detecting cell type differentiation. ABC00010  
 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ASI00010-ASI82073  
 represent the oligomers described in the invention. NOTE: The sequence  
 data for this patent did not form part of the printed specification, but  
 was obtained in electronic format from WIPO at  
 ftp.wipo.int/pub/published\_pct\_sequences  
 Sequence 13 BP; 5 A; 0 C; 2 G; 6 T; 0 U; 0 Other;  
 Query Match 13.7%; Score 10; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 1e+03;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 947 GTTAAATGTA 956  
 |||||  
 2 GTTAAATGTA 11  
 SULT 770  
 F18110  
 ABF18110 standard; DNA; 13 BP.  
 ABF18110;  
 21-FEB-2002 (first entry)  
 Oligonucleotide SEQ ID NO 118107 for detecting SNP TSC0029535.  
 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 Homo sapiens.  
 WO200177384-A2.  
 18-OCT-2001.  
 06-APR-2001; 2001WO-IB000713.  
 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 XX designed to detect single-nucleotide polymorphisms and cytosine  
 XX methylation status.  
 XX Claim 1; SEQ ID NO 118107; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 XX and cytosine methylation status in chemically pretreated genomic DNA. The  
 XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 XX range of diseases including immune system, gastrointestinal, respiratory,  
 XX central nervous system, cardiovascular and metabolic disorders. The  
 XX oligomers are also used for detecting cell type differentiation. ABC00010  
 XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ASI00010-ASI82073  
 XX represent the oligomers described in the invention. NOTE: The sequence  
 XX data for this patent did not form part of the printed specification, but  
 XX was obtained in electronic format from WIPO at  
 XX ftp.wipo.int/pub/published\_pct\_sequences  
 XX SQ Sequence 13 BP; 2 A; 0 C; 2 G; 8 T; 0 U; 1 Other;  
 XX Query Match 13.7%; Score 10; DB 1; Length 13;  
 XX Best Local Similarity 83.3%; Pred. No. 1e+03;  
 XX Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
 QY 907 ATTTCCTTTGGT 918  
 |||||  
 2 ATTTCCTTTGGY 13  
 Db  
 RESULT 771  
 ABF18111/c  
 ID ABF18111 standard; DNA; 13 BP.  
 XX AC ABF18111;  
 XX 21-FEB-2002 (first entry)  
 XX Oligonucleotide SEQ ID NO 118108 for detecting SNP TSC0029535.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 XX designed to detect single-nucleotide polymorphisms and cytosine  
 XX methylation status.  
 XX Claim 1; SEQ ID NO 118108; 29pp + Sequence Listing; German.



```

ABH22127 standard; DNA; 13 BP.
ABH22127;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 222104 for detecting SNP TSC0054046.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 222104; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI92073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 7 A; 3 C; 0 G; 2 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred.No. 1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0
/ 907 ATTTCCTTGGGT 918
) ||||| |||||:
) 12 ATTTGTTGGY 1
RESULT 775
3F52554/c
) ABF52554 standard; DNA; 13 BP.
) ABF52554;
)
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 152551 for detecting SNP TSC0038555.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.

```

DR WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 XX Claim 1; SEQ ID NO 47711; 29pp + Sequence Listing; German.  
 XX  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 XX Sequence 13 BP; 7 A; 0 C; 3 G; 3 T; 0 U; 0 Other;  
 SQ  
 Query Match 13.7%; Score 10; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 1e+03;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 905 TCATTTCCTT 914  
 Db 13 TCATTTCCTT 4  
 |||||  
 |||||  
 RESULT 777  
 ABC27054  
 ID ABC27054 standard; DNA; 13 BP.  
 AC ABC27054;  
 XX  
 XX 20-FEB-2002 (first entry)  
 DT  
 XX  
 XX Oligonucleotide SEQ ID NO 27071 for detecting SNP TSC0007377.  
 DE  
 XX  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 XX Homo sapiens.  
 CS  
 XX  
 XX WO200177384-A2.  
 XX  
 XX 18-OCT-2001.  
 PD  
 XX  
 XX 06-APR-2001; 2001WO-IB000713.  
 PF  
 XX  
 XX 07-APR-2000; 2000DE-01019173.  
 PR  
 XX  
 XX (EPIG-) EPIGENOMICS AG.  
 PA  
 XX  
 XX Olek A, Piepenbrock C, Berlin K;  
 PI  
 XX  
 XX WPI; 2001-657177/75.  
 DR  
 XX  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 XX Claim 1; SEQ ID NO 27071; 29pp + Sequence Listing; German.  
 XX  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 XX Sequence 13 BP; 7 A; 0 C; 3 G; 3 T; 0 U; 0 Other;  
 SQ  
 Query Match 13.7%; Score 10; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 1e+03;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 905 TCATTTCCTT 914  
 Db 13 TCATTTCCTT 4  
 |||||  
 |||||

CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 XX Sequence 13 BP; 0 A; 0 C; 2 G; 10 T; 0 U; 1 Other;  
 SQ  
 Query Match 13.7%; Score 10; DB 1; Length 13;  
 Best Local Similarity 83.3%; Pred. No. 1e+03;  
 Matches 10; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
 QY 908 TTTTCTTTGGTC 919  
 Db 2 TTTTCTTTGGTY 13  
 |||||  
 |||||  
 RESULT 778  
 ABC88696  
 ID ABC88696 standard; DNA; 13 BP.  
 AC ABC88696;  
 XX  
 XX 21-FEB-2002 (first entry)  
 DT  
 XX  
 XX Oligonucleotide SEQ ID NO 88713 for detecting SNP TSC0022295.  
 DE  
 XX  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 XX Homo sapiens.  
 OS  
 XX  
 XX WO200177384-A2.  
 PN  
 XX  
 XX 18-OCT-2001.  
 PD  
 XX  
 XX 06-APR-2001; 2001WO-IB000713.  
 PF  
 XX  
 XX 07-APR-2000; 2000DE-01019173.  
 PR  
 XX  
 XX (EPIG-) EPIGENOMICS AG.  
 PA  
 XX  
 XX Olek A, Piepenbrock C, Berlin K;  
 PI  
 XX  
 XX WPI; 2001-657177/75.  
 DR  
 XX  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 XX Claim 1; SEQ ID NO 88713; 29pp + Sequence Listing; German.  
 XX  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 XX Sequence 13 BP; 3 A; 0 C; 1 G; 9 T; 0 U; 0 Other;  
 SQ  
 Query Match 13.7%; Score 10; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 1e+03;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

948 TTTAATGAT 957
|||||
2 TTTAATGAT 11
|||||

RESULT 779
9F36794
) ABF36794 standard; DNA; 13 BP.
)
) ABF36794;
)
) 21-FEB-2002 (first entry)
)
) Oligonucleotide SEQ ID NO 136791 for detecting SNP TSC0034197.
)
) SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
) peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
) central nervous system; gastrointestinal; respiratory; immune; metabolic.
)
) Homo sapiens.
)
) WO200177384-A2.
)
) 18-OCT-2001.
)
) 06-APR-2001; 2001WO-IB000713.
)
) 07-APR-2000; 2000DE-01019173.
)
) (EPiG-) EPIGENOMICS AG.
)
) Olek A, Piepenbrock C, Berlin K;
)
) WPI; 2001-657177/75.
)
) Set of oligonucleotides, useful for diagnosis and cell typing, is
) designed to detect single-nucleotide polymorphisms and cytosine
) methylation status.
)
) Claim 1; SEQ ID NO 136791; 29pp + Sequence Listing; German.
)
) This invention describes novel oligonucleotide primers or peptide nucleic
) acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
) and cytosine methylation status in chemically pretreated genomic DNA. The
) oligonucleotides are used for diagnosis and/or prognosis of cancer and a
) range of diseases including immune system, gastrointestinal, respiratory,
) central nervous system, cardiovascular and metabolic disorders. The
) oligomers are also used for detecting cell type differentiation. ABC00010
) -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
) represent the oligomers described in the invention. NOTE: The sequence
) data for this patent did not form part of the printed specification, but
) was obtained in electronic format from WIPO at
) ftp.wipo.int/pub/published_pct_sequences
)
) Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;
)
) This invention describes novel oligonucleotide primers or peptide nucleic
) acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
) and cytosine methylation status in chemically pretreated genomic DNA. The
) oligonucleotides are used for diagnosis and/or prognosis of cancer and a
) range of diseases including immune system, gastrointestinal, respiratory,
) central nervous system, cardiovascular and metabolic disorders. The
) oligomers are also used for detecting cell type differentiation. ABC00010
) -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
) represent the oligomers described in the invention. NOTE: The sequence
) data for this patent did not form part of the printed specification, but
) was obtained in electronic format from WIPO at
) ftp.wipo.int/pub/published_pct_sequences
)
) Query Match 13.7%; Score 10; DB 1; Length 13;
) Best Local Similarity 100.0%; Pred. No. 1e+03;
) Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

948 TTTAATGAT 957
|||||
2 TTTAATGAT 11
|||||

SULT 780
H22126
ABH22126 standard; DNA; 13 BP.
)
) ABH22126;
)
) 22-FEB-2002 (first entry)
)

```

```

XX Oligonucleotide SEQ ID NO 222103 for detecting SNP TSC0054046.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPiG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 222103; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 2 A; 0 C; 3 G; 7 T; 0 U; 1 Other;
SQ
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTTCTTGTGT 918
|||||
Db 2 ATTTTGTGGY 13
|||||

RESULT 781
ABF80421/c
ID ABF80421 standard; DNA; 13 BP.
XX
XX ABF80421;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 180418 for detecting SNP TSC0007140.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX

```



```

PP 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 180418; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
SQ
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 948 TTTAATGTAT 957
DB 13 TTTAATGTAT 4
|||||

RESULT 782
ABH54691/C
ID ABH54691 standard; DNA; 13 BP.
XX
AC ABH54691;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 254668 for detecting SNP TSC0062076.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.

```

```

XX
PS Claim 1; SEQ ID NO 254668; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 7 A; 1 C; 0 G; 4 T; 0 U; 1 Other;
SQ
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 948 TTTAATGTAT 957
DB 13 TTTAATGTAT 4
|||||

RESULT 783
ABC52262/C
ID ABC52262 standard; DNA; 13 BP.
XX
AC ABC52262;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 52279 for detecting SNP TSC0014529.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 52279; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but

```

Query Match	Best Local Similarity	Score	DB 1	Length	Mismatches	Indels	Gaps
Sequence 13 BP; 8 A; 0 C; 2 G; 2 T; 0 U; 1 Other;	13.7%;	Score 10; DB 1; Length 13;			0		
Query Match	13.7%;	Score 10; DB 1; Length 13;			0		
Best Local Similarity	100.0%;	Pred. No. 1e+03;			0		
Mismatches	10;	Conservative	0;	Mismatches	0;	Indels	0;
905 TCATTTCCT 914							
10 TCATTTCCT 1							
RESULT 784							
ABF13833							
ABF13833 standard; DNA; 13 BP.							
ABF13833;							
21-FEB-2002 (first entry)							
Oligonucleotide SEQ ID NO 88714 for detecting SNP TSC0022295.							
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;							
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;							
central nervous system; gastrointestinal; respiratory; immune; metabolic.							
Homo sapiens.							
WO200177384-A2.							
18-OCT-2001.							
06-APR-2001; 2001WO-IB000713.							
07-APR-2000; 2000DE-01019173.							
(EPIG-) EPIGENOMICS AG.							
Olek A, Piepenbrock C, Berlin K;							
WPI; 2001-657177/75.							
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.							
Claim 1; SEQ ID NO 88714; 29pp + Sequence Listing; German.							
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences							
Sequence 13 BP; 9 A; 1 C; 0 G; 3 T; 0 U; 0 Other;	13.7%;	Score 10; DB 1; Length 13;			0		
Query Match	13.7%;	Score 10; DB 1; Length 13;			0		
Best Local Similarity	100.0%;	Pred. No. 1e+03;			0		
Mismatches	10;	Conservative	0;	Mismatches	0;	Indels	0;
948 TTTAATGTAT 957							
12 TTTAATGTAT 3							

KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
CS WO200177384-A2.  
XX 18-OCT-2001.  
PD  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
PA  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
XX Claim 1; SEQ ID NO 125026; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX  
SQ Sequence 13 BP; 6 A; 4 C; 0 G; 3 T; 0 U; 0 Other;  
  
Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 945 TGGTTTAATG 954  
Db 11 TGGTTTAATG 2  
|||||  
|  
RESULT 787  
ABF26974  
ID ABF26974 standard; DNA; 13 BP.  
XX  
XX ABF26974;  
AC  
XX  
XX 21-FEB-2002 (first entry)  
DT  
XX  
XX Oligonucleotide SEQ ID NO 126971 for detecting SNP TSC0031781.  
DE  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO200177384-A2.  
FN  
XX  
XX 18-OCT-2001.  
PD  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
PF  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
PA

XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
XX Claim 1; SEQ ID NO 126971; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX  
SQ Sequence 13 BP; 3 A; 0 C; 2 G; 7 T; 0 U; 1 Other;  
  
Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 83.3%; Pred. No. 1e+03;  
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
  
QY 947 GTTTAATGATC 958  
Db 2 GTTTAATGTTT 13  
|||||  
|  
RESULT 788  
ABF26975/c  
ID ABF26975 standard; DNA; 13 BP.  
XX  
XX ABF26975;  
AC  
XX  
XX 21-FEB-2002 (first entry)  
DT  
XX  
XX Oligonucleotide SEQ ID NO 126972 for detecting SNP TSC0031781.  
DE  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO200177384-A2.  
FN  
XX  
XX 18-OCT-2001.  
PD  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
PF  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
PA  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
PI  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
XX Claim 1; SEQ ID NO 126972; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 7 A; 2 C; 0 G; 3 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 83.3%; Pred. No. 1e+03;  
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

947 GTTAAATGATC 958  
|||||||  
12 GTTAAATGTTT 1

RESULT 789

ABF35913/C

ABF35913 standard; DNA; 13 BP.

ABF35913;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 135910 for detecting SNP TSC0033934.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 135910; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 5 A; 4 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

947 GTTAAATGTA 956  
|||||||  
13 GTTAAATGTA 4

RESULT 790

ABH22125/C

ABH22125 standard; DNA; 13 BP.

XX

AC

ABH22125;

XX

DT

22-FEB-2002 (first entry)

XX

DE

Oligonucleotide SEQ ID NO 222102 for detecting SNP TSC0054046.

XX

KW

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

KW

peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

KW

central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX

OS

Homo sapiens.

XX

PN

WO200177384-A2.

XX

PD

18-OCT-2001.

XX

PF

06-APR-2001; 2001WO-IB0000713.

XX

PR

07-APR-2000; 2000DE-01019173.

XX

PA

(EPIG-) EPIGENOMICS AG.

XX

PI

Olek A, Piepenbrock C, Berlin K;

XX

WPI; 2001-657177/75.

XX

PT

Set of oligonucleotides, useful for diagnosis and cell typing, is

PT

designed to detect single-nucleotide polymorphisms and cytosine

PT

methylation status.

XX

PS

Claim 1; SEQ ID NO 222102; 29pp + Sequence Listing; German.

XX

CC

This invention describes novel oligonucleotide primers or peptide nucleic

CC

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

CC

and cytosine methylation status in chemically pretreated genomic DNA. The

CC

oligonucleotides are used for diagnosis and/or prognosis of cancer and a

CC

range of diseases including immune system, gastrointestinal, respiratory,

CC

central nervous system, cardiovascular and metabolic disorders. The

CC

oligomers are also used for detecting cell type differentiation. ABC00010

CC

-ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073

CC

represent the oligomers described in the invention. NOTE: The sequence

CC

data for this patent did not form part of the printed specification, but

CC

was obtained in electronic format from WIPO at

CC

ftp.wipo.int/pub/published\_pct\_sequences

XX

Sequence 13 BP; 8 A; 2 C; 0 G; 2 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 83.3%; Pred. No. 1e+03;  
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

907 ATTTCCTTGGT 918  
|||||||  
12 ATTTCCTTGGT 1

RESULT 791

ABH02152/C

ABH02152 standard; DNA; 13 BP.

XX

AC ABH02152;  
XX  
DT 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 202129 for detecting SNP TSC0049691.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
EN WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
FT methylation status.  
XX  
PS Claim 1; SEQ ID NO 202129; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 9 A; 0 C; 2 G; 2 T; 0 U; 0 Other;  
XX  
XX Query Match 13.7%; Score 10; DB 1; Length 13;  
XX Best Local Similarity 100.0%; Pred. No. 1e+03;  
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
QY 906 CATTTCTTT 915  
DB 13 CATTTCTTT 4  
XX  
RESULT 792  
ABH04495/C  
ID ABH04495 standard; DNA; 13 BP.  
AC  
AC ABH04495;  
XX  
XX 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 204472 for detecting SNP TSC0050159.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
PN WO200177384-A2.

XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
FT methylation status.  
XX  
PS Claim 1; SEQ ID NO 204472; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;  
XX  
XX Query Match 13.7%; Score 10; DB 1; Length 13;  
XX Best Local Similarity 100.0%; Pred. No. 1e+03;  
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
QY 947 GTTTAAATGTA 956  
DB 12 GTTTAAATGTA 3  
XX  
RESULT 793  
ABH59078/C  
ID ABH59078 standard; DNA; 13 BP.  
AC  
AC ABH59078;  
XX  
XX 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 259055 for detecting SNP TSC0007540.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 259055; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and AB100010-AB182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 5 A; 1 C; 2 G; 4 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 83.3%; Pred. No. 1e+03;  
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

947 GTTAAATGATC 958  
:|||||  
13 RTTAAAGTATC 2

RESULT 794  
ABC19221/c  
ABC19221 standard; DNA; 13 BP.

ABC19221;

20-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 19238 for detecting SNP TSC0004017.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPYG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 19238; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010

CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and AB100010-AB182073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 8 A; 1 C; 0 G; 4 T; 0 U; 0 Other;  
Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 948 TTTAATGAT 957  
|||||  
11 TTTAATGAT 2

Db

RESULT 795  
ABC44938  
ID ABC44938 standard; DNA; 13 BP.

XX  
AC ABC44938;

XX  
DT 21-FEB-2002 (first entry)

XX  
DE Oligonucleotide SEQ ID NO 44955 for detecting SNP TSC0013151.

XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX  
OS Homo sapiens.

XX  
WO200177384-A2.

XX  
PD 18-OCT-2001.

XX  
PF 06-APR-2001; 2001WO-IB000713.

XX  
PR 07-APR-2000; 2000DE-01019173.

XX  
PA (EPYG-) EPIGENOMICS AG.

XX  
PI Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.

XX  
DR

XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.

XX  
PS Claim 1; SEQ ID NO 44955; 29pp + Sequence Listing; German.

XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and AB100010-AB182073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 4 A; 0 C; 2 G; 6 T; 0 U; 1 Other;  
Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 947 GTTAAATGTA 956



07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
Claim 1; SEQ ID NO 3468; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
Sequence 13 BP; 2 A; 2 C; 0 G; 9 T; 0 U; 0 Other;  
Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
906 CATTTCCTTT 915  
1 CATTTCCTTT 10  
RESULT 799  
ABC55957/C  
ABC55957 standard; DNA; 13 BP.  
ABC55957;  
21-FEB-2002 (first entry)  
Oligonucleotide SEQ ID NO 55974 for detecting SNP TSC0015229.  
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.  
Homo sapiens.  
WO200177384-A2.  
18-OCT-2001.  
06-APR-2001; 2001WO-IB0000713.  
07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
Claim 1; SEQ ID NO 55974; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
XX Sequence 13 BP; 8 A; 1 C; 0 G; 4 T; 0 U; 0 Other;  
SQ  
Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
948 TTTAATGTAT 957  
12 TTTAATGTAT 3  
Db  
RESULT 800  
ABF09290  
ID ABF09290 standard; DNA; 13 BP.  
XX  
AC ABF09290;  
XX  
DT 21-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 109287 for detecting SNP TSC0027337.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB0000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
XX Claim 1; SEQ ID NO 109287; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
XX



```
XX SQ Sequence 13 BP; 1 A; 1 C; 4 G; 6 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTCTTTGGT 918
DB 2 ATTTCTTTGGY 13
|||||
RESULT 801
ABF09291/c
ID ABF09291 standard; DNA; 13 BP.
XX AC ABF09291;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 109288 for detecting SNP TSC0027337.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2001; 2001WO-IB000713.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 109288; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC95989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 6 A; 4 C; 1 G; 1 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTCTTTGGT 918
DB 12 ATTTCTTTGGY 1
|||||
RESULT 802
ABF09291/c
ID ABF09291 standard; DNA; 13 BP.
XX AC ABF09291;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 109288 for detecting SNP TSC0027337.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2001; 2001WO-IB000713.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 109288; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC95989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 4 A; 0 C; 5 G; 3 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 923 GCCTTTTATCCC 934
DB 13 RCTTTTATCCC 2
|||||
RESULT 803
ABF74916
ID ABF74916 standard; DNA; 13 BP.
XX AC ABF74916;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 174913 for detecting SNP TSC0043493.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
```

Homo sapiens.  
 WO200177384-A2.  
 18-OCT-2001.  
 06-APR-2001; 2001WO-IB000713.  
 07-APR-2000; 2000DE-01019173.  
 (EPIG-) EPIGENOMICS AG.  
 Olek A, Piepenbrock C, Berlin K;  
 WPI; 2001-657177/75.  
 Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
 Claim 1; SEQ ID NO 174913; 29pp + Sequence Listing; German.  
 This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABR00010-ABR2073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 4 A; 0 C; 1 G; 8 T; 0 U; 0 Other;  
 Query Match 13.7%; Score 10; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 1e+03;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

948 TTTAATGTAT 957  
 1 TTTAATGTAT 10  
 |||||

SULT 804  
 F52555  
 ABF52555 standard; DNA; 13 BP.  
 ABF52555;  
 21-FEB-2002 (first entry)  
 Oligonucleotide SEQ ID NO 152552 for detecting SNP TSC0038555.  
 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 Homo sapiens.  
 WO200177384-A2.  
 18-OCT-2001.  
 06-APR-2001; 2001WO-IB000713.  
 07-APR-2000; 2000DE-01019173.  
 (EPIG-) EPIGENOMICS AG.  
 Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.  
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
 XX Claim 1; SEQ ID NO 152552; 29pp + Sequence Listing; German.  
 CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABR00010-ABR2073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 4 A; 5 C; 0 G; 4 T; 0 U; 0 Other;  
 SQ Query Match 13.7%; Score 10; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 1e+03;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 934 CTCCTCTTCA 943  
 3 CTCCTCTTCA 12  
 |||||

RESULT 805  
 ABH04333  
 ID ABH04333 standard; DNA; 13 BP.  
 XX AC ABH04333;  
 XX DT 22-FEB-2002 (first entry)  
 XX DE Oligonucleotide SEQ ID NO 204310 for detecting SNP TSC0050117.  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX OS Homo sapiens.  
 XX PN WO200177384-A2.  
 XX PD 18-OCT-2001.  
 XX PF 06-APR-2001; 2001WO-IB000713.  
 XX PR 07-APR-2000; 2000DE-01019173.  
 PA (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 PI WPI; 2001-657177/75.  
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
 XX Claim 1; SEQ ID NO 204310; 29pp + Sequence Listing; German.  
 CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABR00010-ABR2073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 CC  
 XX Sequence 13 BP; 3 A; 2 C; 0 G; 8 T; 0 U; 0 Other;  
 SQ Query Match 13.7%; Score 10; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 1e+03;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 905 TCATTTCCTT 914  
 DB 3 TCATTTCCTT 12  
 |||||

RESULT 806  
 ABF61636  
 ID ABF61636 standard; DNA; 13 BP.  
 XX AC ABF61636;  
 XX DT 22-FEB-2002 (first entry)  
 XX DE Oligonucleotide SEQ ID NO 161633 for detecting SNP TSC0040687.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 XX designed to detect single-nucleotide polymorphisms and cytosine  
 XX methylation status.  
 XX Claim 1; SEQ ID NO 161633; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 XX and cytosine methylation status in chemically pretreated genomic DNA. The  
 XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 XX range of diseases including immune system, gastrointestinal, respiratory,  
 XX central nervous system, cardiovascular and metabolic disorders. The  
 XX oligomers are also used for detecting cell type differentiation. ABC00010  
 XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 XX represent the oligomers described in the invention. NOTE: The sequence  
 XX data for this patent did not form part of the printed specification, but  
 XX was obtained in electronic format from WIPO at  
 XX ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 5 A; 0 C; 2 G; 6 T; 0 U; 0 Other;  
 XX Query Match 13.7%; Score 10; DB 1; Length 13;  
 XX Best Local Similarity 100.0%; Pred. No. 1e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 947 GTTAAATGTA 956  
 DB 2 GTTAAATGTA 11  
 |||||

RESULT 807  
 ABC71247  
 ID ABC71247 standard; DNA; 13 BP.  
 XX AC ABC71247;  
 XX DT 21-FEB-2002 (first entry)  
 XX DE Oligonucleotide SEQ ID NO 71264 for detecting SNP TSC0018464.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 XX designed to detect single-nucleotide polymorphisms and cytosine  
 XX methylation status.  
 XX Claim 1; SEQ ID NO 71264; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 XX and cytosine methylation status in chemically pretreated genomic DNA. The  
 XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 XX range of diseases including immune system, gastrointestinal, respiratory,  
 XX central nervous system, cardiovascular and metabolic disorders. The  
 XX oligomers are also used for detecting cell type differentiation. ABC00010  
 XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 XX represent the oligomers described in the invention. NOTE: The sequence  
 XX data for this patent did not form part of the printed specification, but  
 XX was obtained in electronic format from WIPO at  
 XX ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 2 A; 6 C; 0 G; 5 T; 0 U; 0 Other;  
 XX Query Match 13.7%; Score 10; DB 1; Length 13;  
 XX Best Local Similarity 100.0%; Pred. No. 1e+03;  
 XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 931 TCCCTCCTCT 940  
 DB 1 TCCCTCCTCT 10  
 |||||

RESULT 808  
 ABC26064/c  
 ID ABC26064 standard; DNA; 13 BP.  
 XX AC ABC26064;  
 XX

```

20-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 26081 for detecting SNP TSC0006747.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 26081; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 8 A; 0 C; 3 G; 2 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
906 CATTTCCTTT 915
|||||||
11 CATTTCCTTT 2
SULT 809
CS0964
ABC50964 standard; DNA; 13 BP.
ABC50964;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 50981 for detecting SNP TSC0014267.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 50981; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 5 A; 0 C; 2 G; 5 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 947 GTTTAATGTA 956
|||||||
Db 1 GTTTAATGTA 10
RESULT 810
ABF32039/c
ID ABF32039 standard; DNA; 13 BP.
XX
AC ABF32039;
XX
XX 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 132036 for detecting SNP TSC0032957.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
DR Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
PS Claim 1; SEQ ID NO 50981; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 5 A; 0 C; 2 G; 5 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 947 GTTTAATGTA 956
|||||||
Db 1 GTTTAATGTA 10

```



```

>SULT 813
>C27473/c
> ) ABC27473 standard; DNA; 13 BP.
>
> ABC27473;
>
> 20-FEB-2002 (first entry)
>
> Oligonucleotide SEQ ID NO 27490 for detecting SNP TSC0007640.
>
> SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
> peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
> central nervous system; gastrointestinal; respiratory; immune; metabolic.
>
> Homo sapiens.
>
> WO200177384-A2.
>
> 18-OCT-2001.
>
> 06-APR-2001; 2001WO-IB000713.
>
> 07-APR-2000; 2000DE-01019173.
>
> (EPIG-) EPIGENOMICS AG.
>
> Olek A, Piepenbrock C, Berlin K;
>
> WPI; 2001-657177/75.
>
> Set of oligonucleotides, useful for diagnosis and cell typing, is
> designed to detect single-nucleotide polymorphisms and cytosine
> methylation status.
>
> Claim 1; SEQ ID NO 27490; 29pp + Sequence Listing; German.
>
> This invention describes novel oligonucleotide primers or peptide nucleic
> acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
> and cytosine methylation status in chemically pretreated genomic DNA. The
> oligonucleotides are used for diagnosis and/or prognosis of cancer and a
> range of diseases including immune system, gastrointestinal, respiratory,
> central nervous system, cardiovascular and metabolic disorders. The
> oligomers are also used for detecting cell type differentiation. ABC00010
> -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
> represent the oligomers described in the invention. NOTE: The sequence
> data for this patent did not form part of the printed specification, but
> was obtained in electronic format from WIPO at
> ftp.wipo.int/pub/published_pct_sequences
>
> Sequence 13 BP; 8 A; 1 C; 0 G; 3 T; 0 U; 1 Other;
>
> This invention describes novel oligonucleotide primers or peptide nucleic
> acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
> and cytosine methylation status in chemically pretreated genomic DNA. The
> oligonucleotides are used for diagnosis and/or prognosis of cancer and a
> range of diseases including immune system, gastrointestinal, respiratory,
> central nervous system, cardiovascular and metabolic disorders. The
> oligomers are also used for detecting cell type differentiation. ABC00010
> -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
> represent the oligomers described in the invention. NOTE: The sequence
> data for this patent did not form part of the printed specification, but
> was obtained in electronic format from WIPO at
> ftp.wipo.int/pub/published_pct_sequences
>
> Sequence 13 BP; 8 A; 1 C; 0 G; 3 T; 0 U; 1 Other;
>
> Query Match 13.7%; Score 10; DB 1; Length 13;
> Best Local Similarity 100.0%; Pred. No. 1e+03;
> Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
>
> 948 TTTAATGAT 957
> |||||
> 12 TTTAATGAT 3
>
>SULT 814
>C31700/c
> ) ABC31700 standard; DNA; 13 BP.
>
> ABC31700;
>
> 20-FEB-2002 (first entry)
>
> Oligonucleotide SEQ ID NO 31717 for detecting SNP TSC0009885.
>
> SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

```

---

```

KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 31717; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 8 A; 0 C; 4 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 13.7%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 905 TCATTTTCTT 914
XX |||||
XX DB 10 TCATTTTCTT 1
XX
XX RESULT 815
XX ABF13832/c
XX ID ABF13832 standard; DNA; 13 BP.
XX
XX AC ABF13832;
XX
XX DT 21-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 113829 for detecting SNP TSC0028504.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX

```

PA (EPIG-) EPIGENOMICS AG.  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 113829; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX Sequence 13 BP; 4 A; 1 C; 5 G; 2 T; 0 U; 1 Other;  
 SQ

Query Match 13.7%; Score 10; DB 1; Length 13;  
 Best Local Similarity 83.3%; Pred. No. 1e+03;  
 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

OY 923 GCCTTTATCC 934  
 Db 13 KCCTATTATCC 2  
 :|||:|||||  
 13 KCCTATTATCC 2

RESULT 816  
 ABF18108  
 ID ABF18108 standard; DNA; 13 BP.  
 AC ABF18108;  
 XX 21-FEB-2002 (first entry)  
 DT  
 XX Oligonucleotide SEQ ID NO 118105 for detecting SNP TSC0029535.  
 CE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 OS  
 XX WO200177384-A2.  
 PN  
 XX 18-OCT-2001.  
 PD  
 XX 06-APR-2001; 2001WO-IB000713.  
 PF  
 XX 07-APR-2000; 2000DE-01019173.  
 PR (EPIG-) EPIGENOMICS AG.  
 PA Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 118105; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic

CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX Sequence 13 BP; 1 A; 0 C; 3 G; 8 T; 0 U; 1 Other;  
 SQ

Query Match 13.7%; Score 10; DB 1; Length 13;  
 Best Local Similarity 83.3%; Pred. No. 1e+03;  
 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

OY 907 ATTTTCTTTGGT 918  
 Db 2 ATTTTGTGGY 13  
 :|||||:|||||  
 2 ATTTTGTGGY 13

RESULT 817  
 ABH25090/c  
 ID ABH25090 standard; DNA; 13 BP.  
 AC ABH25090;  
 XX 22-FEB-2002 (first entry)  
 DT  
 XX Oligonucleotide SEQ ID NO 225067 for detecting SNP TSC0054876.  
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 OS  
 XX WO200177384-A2.  
 PN  
 XX 18-OCT-2001.  
 PD  
 XX 06-APR-2001; 2001WO-IB000713.  
 PF  
 XX 07-APR-2000; 2000DE-01019173.  
 PR (EPIG-) EPIGENOMICS AG.  
 PA Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 225067; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX Sequence 13 BP; 4 A; 1 C; 4 G; 4 T; 0 U; 0 Other;  
 SQ

```

Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03; 0; Indels 0; Gaps 0;
Matches 10; Conservative 0; Mismatches 0;

      955 TATCGCTACC 964
      |||||
      10 TATCGCTACC 1

RESULT 818
) AH04673 standard; DNA; 13 BP.
) ABH04673;
) 22-FEB-2002 (first entry)
) Oligonucleotide SEQ ID NO 204650 for detecting SNP TSC0050210.
) SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
) peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
) central nervous system; gastrointestinal; respiratory; immune; metabolic.
) Homo sapiens.
) WO200177384-A2.
) 18-OCT-2001.
) 06-APR-2001; 2001WO-IB000713.
) 07-APR-2000; 2000DE-01019173.
) (EPiG-) EPIGENOMICS AG.
) Olek A, Piepenbrock C, Berlin K;
) WPI; 2001-657177/75.
) Set of oligonucleotides, useful for diagnosis and cell typing, is
) designed to detect single-nucleotide polymorphisms and cytosine
) methylation status.
) Claim 1; SEQ ID NO 204650; 29pp + Sequence Listing; German.
) This invention describes novel oligonucleotide primers or peptide nucleic
) acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
) and cytosine methylation status in chemically pretreated genomic DNA. The
) oligonucleotides are used for diagnosis and/or prognosis of cancer and a
) range of diseases including immune system, gastrointestinal, respiratory,
) central nervous system, cardiovascular and metabolic disorders. The
) oligomers are also used for detecting cell type differentiation. ABC00010
) -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
) represent the oligomers described in the invention. NOTE: The sequence
) data for this patent did not form part of the printed specification, but
) was obtained in electronic format from WIPO at
) ftp.wipo.int/pub/published_pct_sequences
)
) Sequence 13 BP; 4 A; 2 C; 0 G; 7 T; 0 U; 0 Other;
)
) Query Match      13.7%; Score 10; DB 1; Length 13;
) Best Local Similarity 100.0%; Pred. No. 1e+03; 0; Indels 0; Gaps 0;
) Matches 10; Conservative 0; Mismatches 0;

      905 TCATTTCCT 914
      |||||
      1 TCATTTCCT 10

RESULT 819
) AH04673/c
) ABH04673 standard; DNA; 13 BP.

```

---

```

XX ABH61067;
XX AC
XX 22-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 261044 for detecting SNP TSC0063384.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPiG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 261044; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 5 A; 4 C; 0 G; 4 T; 0 U; 0 Other;
XX
XX Query Match      13.7%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1e+03; 0; Indels 0; Gaps 0;
XX Matches 10; Conservative 0; Mismatches 0;

QY 943 ATTGCTTTAA 952
DB |||||
  10 ATTGCTTTAA 1

RESULT 820
ABC27472
ID ABC27472 standard; DNA; 13 BP.
XX
XX ABC27472;
XX 20-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 27489 for detecting SNP TSC0007640.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX

```



FN WO200177384-A2.  
 XX  
 PD 18-OCT-2001.  
 XX  
 PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 PR 07-APR-2000; 2000DE-01019173.  
 XX  
 XX (EPIG-) EPIGENOMICS AG.  
 PA  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 DR WPI; 2001-657177/75.  
 XX  
 XX  
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 XX Claim 1; SEQ ID NO 27489; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ASC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 3 A; 0 C; 1 G; 8 T; 0 U; 1 Other;  
 Query Match 13.7%; Score 10; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 1e+03;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 CY 948 TTTAATGTAT 957  
 DB 2 TTTAATGTAT 11  
 |||||  
 RESULT 821  
 ABC86879/C  
 ID ABC86879 standard; DNA; 13 BP.  
 AC  
 AC ABC86879;  
 XX  
 XX 21-FEB-2002 (first entry)  
 DE  
 DE Oligonucleotide SEQ ID NO 8696 for detecting SNP TSC0021828.  
 XX  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 CS  
 WO200177384-A2.  
 FN  
 FN 18-OCT-2001.  
 FD  
 FD 06-APR-2001; 2001WO-IB000713.  
 XX  
 XX 07-APR-2000; 2000DE-01019173.  
 PR  
 PR (EPIG-) EPIGENOMICS AG.  
 FA  
 FI Olek A, Piepenbrock C, Berlin K;  
 XX  
 XX WPI; 2001-657177/75.  
 DR

XX  
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 XX Claim 1; SEQ ID NO 8696; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ASC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 6 A; 2 C; 0 G; 5 T; 0 U; 0 Other;  
 Query Match 13.7%; Score 10; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 1e+03;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 CY 947 GTTTAATGTA 956  
 DB 12 GTTTAATGTA 3  
 |||||  
 RESULT 822  
 ABH20195  
 ID ABH20195 standard; DNA; 13 BP.  
 XX  
 AC ABH20195;  
 XX  
 XX 22-FEB-2002 (first entry)  
 DT  
 DE Oligonucleotide SEQ ID NO 220172 for detecting SNP TSC0053577.  
 XX  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 CS  
 PN WO200177384-A2.  
 XX  
 PD 18-OCT-2001.  
 XX  
 XX 06-APR-2001; 2001WO-IB000713.  
 PF  
 XX 07-APR-2000; 2000DE-01019173.  
 PR  
 PR (EPIG-) EPIGENOMICS AG.  
 PA  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 XX WPI; 2001-657177/75.  
 DR  
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 XX Claim 1; SEQ ID NO 220172; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The

```

1 oligomers are also used for detecting cell type differentiation. ABC00010
2 -ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
3 represent the oligomers described in the invention. NOTE: The sequence
4 data for this patent did not form part of the printed specification, but
5 was obtained in electronic format from WIPO at
6 ftp.wipo.int/pub/published_pct_sequences
7
8 Sequence 13 BP; 1 A; 5 C; 0 G; 7 T; 0 U; 0 Other;
9
10 Query Match 13.7%; Score 10; DB 1; Length 13;
11 Best Local Similarity 100.0%; Pred. No. 1e+03;
12 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
13
14 925 CTTTATCCC 934
15 |||||
16 1 CTTTATCCC 10
17
18 RESULT 823
19 ABH23313/C
20 ABH23313 standard; DNA; 13 BP.
21
22 ABH23313;
23
24 22-FEB-2002 (first entry)
25
26 Oligonucleotide SEQ ID NO 223290 for detecting SNP TSC0005484.
27
28 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
29 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
30 central nervous system; gastrointestinal; respiratory; immune; metabolic.
31
32 Homo sapiens.
33
34 WO200177384-A2.
35
36 18-OCT-2001.
37
38 06-APR-2001; 2001WO-IB000713.
39
40 07-APR-2000; 2000DE-01019173.
41
42 (EPIG-) EPIGENOMICS AG.
43
44 Olek A, Piepenbrock C, Berlin K;
45
46 WPI; 2001-657177/75.
47
48 Set of oligonucleotides, useful for diagnosis and cell typing, is
49 designed to detect single-nucleotide polymorphisms and cytosine
50 methylation status.
51
52 Claim 1; SEQ ID NO 223290; 29pp + Sequence Listing; German.
53
54 This invention describes novel oligonucleotide primers or peptide nucleic
55 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
56 and cytosine methylation status in chemically pretreated genomic DNA. The
57 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
58 range of diseases including immune system, gastrointestinal, respiratory,
59 central nervous system, cardiovascular and metabolic disorders. The
60 oligomers are also used for detecting cell type differentiation. ABC00010
61 -ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
62 represent the oligomers described in the invention. NOTE: The sequence
63 data for this patent did not form part of the printed specification, but
64 was obtained in electronic format from WIPO at
65 ftp.wipo.int/pub/published_pct_sequences
66
67 Sequence 13 BP; 7 A; 2 C; 0 G; 3 T; 0 U; 1 Other;
68
69 Query Match 13.7%; Score 10; DB 1; Length 13;
70 Best Local Similarity 83.3%; Pred. No. 1e+03;
71 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
72
73 oligomers are also used for detecting cell type differentiation. ABC00010
74 -ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
75 represent the oligomers described in the invention. NOTE: The sequence
76 data for this patent did not form part of the printed specification, but
77 was obtained in electronic format from WIPO at
78 ftp.wipo.int/pub/published_pct_sequences
79
80 Sequence 13 BP; 5 A; 0 C; 6 G; 2 T; 0 U; 0 Other;
81
82 Query Match 13.7%; Score 10; DB 1; Length 13;
83 Best Local Similarity 100.0%; Pred. No. 1e+03;
84 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
85
86 931 TCCCTCCTCT 940
87 |||||
88 13 TCCCTCCTCT 4
89
90 RESULT 825
91 ABF18109/C
92 ABF18109 standard; DNA; 13 BP.
93
94 AC
95 ABF18109;
96
97 21-FEB-2002 (first entry)
98
99 XX
```

```

QY 907 ATTTCTTTGGT 918
DB 12 ATTTATTGGY 1
|||
AC ABC71246;
XX ABC71246;
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 71263 for detecting SNP TSC0018464.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 71263; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 5 A; 0 C; 6 G; 2 T; 0 U; 0 Other;
XX
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 931 TCCCTCCTCT 940
DB 13 TCCCTCCTCT 4
|||
RESULT 825
ABF18109/C
ID ABF18109 standard; DNA; 13 BP.
XX
AC
ABF18109;
XX
DT 21-FEB-2002 (first entry)
XX
```

```

DE Oligonucleotide SEQ ID NO 118106 for detecting SNP TSC0029535.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 118106; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 8 A; 3 C; 0 G; 1 T; 0 U; 1 Other;
XX
XX Query Match 13.7%; Score 10; DB 1; Length 13;
XX Best Local Similarity 83.3%; Pred. No. 1e+03;
XX Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 907 ATTTTCTTTGTT 918
XX 12 ATTTTGTTTGGY 1
XX
XX RESULT 826
XX ABF18585/C
XX ID ABF18585 standard; DNA; 13 BP.
XX AC ABF18585;
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 118582 for detecting SNP TSC0029619.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX
XX Oligonucleotide SEQ ID NO 118106 for detecting SNP TSC0029535.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.

```

```

XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 118582; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 9 A; 1 C; 0 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 13.7%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 948 TTTAATGTAT 957
XX 13 TTTAATGTAT 4
XX
XX RESULT 827
XX ABF69464
XX ID ABF69464 standard; DNA; 13 BP.
XX AC ABF69464;
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 169461 for detecting SNP TSC0042329.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.

```

```
Claim 1; SEQ ID NO 169461; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 0 C; 2 G; 8 T; 0 U; 1 Other;

Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

944 TTGTTTAAATGT 955
|||||
2 TTGTTTAAATGY 13

RESULT 828
3F69932
) ABF69932 standard; DNA; 13 BP.
) ABF69932;
) 22-FEB-2002 (first entry)
) Oligonucleotide SEQ ID NO 169929 for detecting SNP TSC0006683.
) SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
) peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
) central nervous system; gastrointestinal; respiratory; immune; metabolic.
) Homo sapiens.
) WO200177384-A2.
) 18-OCT-2001.
) 06-APR-2001; 2001WO-IB000713.
) 07-APR-2000; 2000DE-01019173.
) (EPIG-) EPIGENOMICS AG.
) Olek A, Piepenbrock C, Berlin K;
) WPI; 2001-657177/75.
) Set of oligonucleotides, useful for diagnosis and cell typing, is
) designed to detect single-nucleotide polymorphisms and cytosine
) methylation status.
) Claim 1; SEQ ID NO 169929; 29pp + Sequence Listing; German.
) This invention describes novel oligonucleotide primers or peptide nucleic
) acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
) and cytosine methylation status in chemically pretreated genomic DNA. The
) oligonucleotides are used for diagnosis and/or prognosis of cancer and a
) range of diseases including immune system, gastrointestinal, respiratory,
) central nervous system, cardiovascular and metabolic disorders. The
) oligomers are also used for detecting cell type differentiation. ABC00010
) -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
) represent the oligomers described in the invention. NOTE: The sequence
) data for this patent did not form part of the printed specification, but
) was obtained in electronic format from WIPO at
) ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 0 C; 2 G; 8 T; 0 U; 0 Other;

Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

944 TTGTTTAAATGT 955
|||||
2 TTGTTTAAATGY 13

RESULT 829
ABF69933/C
ID ABF69933 standard; DNA; 13 BP.
XX AC ABF69933;
XX AC ABF69933;
XX 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 169930 for detecting SNP TSC0006683.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 169930; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;

Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

948 TTTAATGCTAT 957
|||||
13 TTTAATGCTAT 4

Db
```

```
RESULT 830
ABF70153/c
XX ABF70153 standard; DNA; 13 BP.
AC ABF70153;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 170150 for detecting SNP TSC0042480.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 170150 for detecting SNP TSC0042480.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 170150; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Query Match 13.7%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 948 TTTAATGTAT 957
XX |||||
XX Db 12 TTTAATGTAT 3
XX
XX RESULT 831
ABH22124
XX ABH22124 standard; DNA; 13 BP.
XX
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 222101 for detecting SNP TSC0054046.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
```

```
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 222101; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 2 A; 0 C; 2 G; 8 T; 0 U; 1 Other;
XX
XX Query Match 13.7%; Score 10; DB 1; Length 13;
XX Best Local Similarity 83.3%; Pred. No. 1e+03;
XX Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 907 ATTTCCTTGGT 918
XX |||||
XX Db 2 ATTTCCTTGGT 13
XX
XX RESULT 832
ABC27055/c
XX ABC27055 standard; DNA; 13 BP.
XX
XX
XX 20-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 27072 for detecting SNP TSC0007377.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
```

```
1 Olek A, Piepenbrock C, Berlin K;
2 WPI; 2001-657177/75.
3
4 Set of oligonucleotides, useful for diagnosis and cell typing, is
5 designed to detect single-nucleotide polymorphisms and cytosine
6 methylation status.
7
8 Claim 1; SEQ ID NO 27072; 29pp + Sequence Listing; German.
9
10 This invention describes novel oligonucleotide primers or peptide nucleic
11 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
12 and cytosine methylation status in chemically pretreated genomic DNA. The
13 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
14 range of diseases including immune system, gastrointestinal, respiratory,
15 central nervous system, cardiovascular and metabolic disorders. The
16 oligomers are also used for detecting cell type differentiation. ABC00010
17 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
18 represent the oligomers described in the invention. NOTE: The sequence
19 data for this patent did not form part of the printed specification, but
20 was obtained in electronic format from WIPO at
21 ftp.wipo.int/pub/published_pct_sequences
22
23 Sequence 13 BP; 10 A; 2 C; 0 G; 0 T; 0 U; 1 Other;
24
25 Query Match 13.7%; Score 10; DB 1; Length 13;
26 Best Local Similarity 83.3%; Pred. No. 1e+03;
27 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
28
29 / 908 TTTCTTTGGTC 919
30 ||||| |||||
31 12 TTTTCTTGGTY 1
32
33 RESULT 833
34 ABC04504
35 ) ABF04504 standard; DNA; 13 BP.
36
37 K ABF04504;
38
39 I 21-FEB-2002 (first entry)
40
41 E Oligonucleotide SEQ ID NO 104501 for detecting SNP TSC0026125.
42
43 M SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
44 M peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
45 M central nervous system; gastrointestinal; respiratory; immune; metabolic.
46
47 S Homo sapiens.
48
49 K WO200177384-A2.
50
51 ) 18-OCT-2001.
52
53 { 06-APR-2001; 2001WO-IB000713.
54
55 { 07-APR-2000; 2000DE-01019173.
56
57 { (EPIG-) EPIGENOMICS AG.
58
59 { Olek A, Piepenbrock C, Berlin K;
60
61 S WPI; 2001-657177/75.
62
63 T Set of oligonucleotides, useful for diagnosis and cell typing, is
64 designed to detect single-nucleotide polymorphisms and cytosine
65 methylation status.
66
67 S Claim 1; SEQ ID NO 104501; 29pp + Sequence Listing; German.
68
69 This invention describes novel oligonucleotide primers or peptide nucleic
70 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
71 and cytosine methylation status in chemically pretreated genomic DNA. The
72 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
73 range of diseases including immune system, gastrointestinal, respiratory,
74 central nervous system, cardiovascular and metabolic disorders. The
75 oligomers are also used for detecting cell type differentiation. ABC00010
76 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
77 represent the oligomers described in the invention. NOTE: The sequence
78 data for this patent did not form part of the printed specification, but
79 was obtained in electronic format from WIPO at
80 ftp.wipo.int/pub/published_pct_sequences
81
82 Sequence 13 BP; 6 A; 0 C; 5 G; 1 T; 0 U; 1 Other;
83
84 Query Match 13.7%; Score 10; DB 1; Length 13;
85 Best Local Similarity 83.3%; Pred. No. 1e+03;
86 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
87
88 QY 908 TTTCTTTGGTC 919
89 ||||| |||||
90 2 TTTTCTTGGTY 13
91
92 Db 2 TTTTCTTGGTY 13
93
94 RESULT 834
95 ABC30230/C
96 ID ABC30230 standard; DNA; 13 BP.
97
98 XX AC ABC30230;
99
100 XX AC ABC30230;
101
102 DT 20-FEB-2002 (first entry)
103
104 XX Oligonucleotide SEQ ID NO 30247 for detecting SNP TSC0009193.
105
106 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
107 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
108 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
109
110 XX Homo sapiens.
111
112 XX WO200177384-A2.
113
114 XX 18-OCT-2001.
115
116 PF 06-APR-2001; 2001WO-IB000713.
117
118 XX 07-APR-2000; 2000DE-01019173.
119
120 PR (EPIG-) EPIGENOMICS AG.
121
122 XX Olek A, Piepenbrock C, Berlin K;
123
124 PI WPI; 2001-657177/75.
125
126 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
127 designed to detect single-nucleotide polymorphisms and cytosine
128 methylation status.
129
130 XX Claim 1; SEQ ID NO 30247; 29pp + Sequence Listing; German.
131
132 This invention describes novel oligonucleotide primers or peptide nucleic
133 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
134 and cytosine methylation status in chemically pretreated genomic DNA. The
135 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
136 range of diseases including immune system, gastrointestinal, respiratory,
137 central nervous system, cardiovascular and metabolic disorders. The
138 oligomers are also used for detecting cell type differentiation. ABC00010
139 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
140 represent the oligomers described in the invention. NOTE: The sequence
141 data for this patent did not form part of the printed specification, but
142 was obtained in electronic format from WIPO at
143 ftp.wipo.int/pub/published_pct_sequences
144
145 XX Sequence 13 BP; 6 A; 0 C; 5 G; 1 T; 0 U; 1 Other;
146
147 Query Match 13.7%; Score 10; DB 1; Length 13;
148 Best Local Similarity 83.3%; Pred. No. 1e+03;
149 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
150
151 QY 908 TTTCTTTGGTC 919
152 ||||| |||||
153 2 TTTTCTTGGTY 13
154
155 Db 2 TTTTCTTGGTY 13
156
157 RESULT 834
158 ABC30230/C
159 ID ABC30230 standard; DNA; 13 BP.
160
161 XX AC ABC30230;
162
163 XX AC ABC30230;
164
165 DT 20-FEB-2002 (first entry)
166
167 XX Oligonucleotide SEQ ID NO 30247 for detecting SNP TSC0009193.
168
169 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
170 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
171 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
172
173 XX Homo sapiens.
174
175 XX WO200177384-A2.
176
177 XX 18-OCT-2001.
178
179 PF 06-APR-2001; 2001WO-IB000713.
180
181 XX 07-APR-2000; 2000DE-01019173.
182
183 PR (EPIG-) EPIGENOMICS AG.
184
185 XX Olek A, Piepenbrock C, Berlin K;
186
187 PI WPI; 2001-657177/75.
188
189 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
190 designed to detect single-nucleotide polymorphisms and cytosine
191 methylation status.
192
193 XX Claim 1; SEQ ID NO 30247; 29pp + Sequence Listing; German.
194
195 This invention describes novel oligonucleotide primers or peptide nucleic
196 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
197 and cytosine methylation status in chemically pretreated genomic DNA. The
198 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
199 range of diseases including immune system, gastrointestinal, respiratory,
200 central nervous system, cardiovascular and metabolic disorders. The
201 oligomers are also used for detecting cell type differentiation. ABC00010
202 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
203 represent the oligomers described in the invention. NOTE: The sequence
204 data for this patent did not form part of the printed specification, but
205 was obtained in electronic format from WIPO at
206 ftp.wipo.int/pub/published_pct_sequences
207
208 XX Sequence 13 BP; 6 A; 0 C; 5 G; 1 T; 0 U; 1 Other;
209
210 Query Match 13.7%; Score 10; DB 1; Length 13;
211 Best Local Similarity 83.3%; Pred. No. 1e+03;
212 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
213
214 QY 908 TTTCTTTGGTC 919
215 ||||| |||||
216 2 TTTTCTTGGTY 13
217
218 Db 2 TTTTCTTGGTY 13
219
220 RESULT 834
221 ABC30230/C
222 ID ABC30230 standard; DNA; 13 BP.
223
224 XX AC ABC30230;
225
226 XX AC ABC30230;
227
228 DT 20-FEB-2002 (first entry)
229
230 XX Oligonucleotide SEQ ID NO 30247 for detecting SNP TSC0009193.
231
232 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
233 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
234 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
235
236 XX Homo sapiens.
237
238 XX WO200177384-A2.
239
240 XX 18-OCT-2001.
241
242 PF 06-APR-2001; 2001WO-IB000713.
243
244 XX 07-APR-2000; 2000DE-01019173.
245
246 PR (EPIG-) EPIGENOMICS AG.
247
248 XX Olek A, Piepenbrock C, Berlin K;
249
250 PI WPI; 2001-657177/75.
251
252 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
253 designed to detect single-nucleotide polymorphisms and cytosine
254 methylation status.
255
256 XX Claim 1; SEQ ID NO 30247; 29pp + Sequence Listing; German.
257
258 This invention describes novel oligonucleotide primers or peptide nucleic
259 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
260 and cytosine methylation status in chemically pretreated genomic DNA. The
261 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
262 range of diseases including immune system, gastrointestinal, respiratory,
263 central nervous system, cardiovascular and metabolic disorders. The
264 oligomers are also used for detecting cell type differentiation. ABC00010
265 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
266 represent the oligomers described in the invention. NOTE: The sequence
267 data for this patent did not form part of the printed specification, but
268 was obtained in electronic format from WIPO at
269 ftp.wipo.int/pub/published_pct_sequences
270
271 XX Sequence 13 BP; 6 A; 0 C; 5 G; 1 T; 0 U; 1 Other;
272
273 Query Match 13.7%; Score 10; DB 1; Length 13;
274 Best Local Similarity 83.3%; Pred. No. 1e+03;
275 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
276
277 QY 908 TTTCTTTGGTC 919
278 ||||| |||||
279 2 TTTTCTTGGTY 13
280
281 Db 2 TTTTCTTGGTY 13
282
283 RESULT 834
284 ABC30230/C
285 ID ABC30230 standard; DNA; 13 BP.
286
287 XX AC ABC30230;
288
289 XX AC ABC30230;
290
291 DT 20-FEB-2002 (first entry)
292
293 XX Oligonucleotide SEQ ID NO 30247 for detecting SNP TSC0009193.
294
295 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
296 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
297 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
298
299 XX Homo sapiens.
300
301 XX WO200177384-A2.
302
303 XX 18-OCT-2001.
304
305 PF 06-APR-2001; 2001WO-IB000713.
306
307 XX 07-APR-2000; 2000DE-01019173.
308
309 PR (EPIG-) EPIGENOMICS AG.
310
311 XX Olek A, Piepenbrock C, Berlin K;
312
313 PI WPI; 2001-657177/75.
314
315 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
316 designed to detect single-nucleotide polymorphisms and cytosine
317 methylation status.
318
319 XX Claim 1; SEQ ID NO 30247; 29pp + Sequence Listing; German.
320
321 This invention describes novel oligonucleotide primers or peptide nucleic
322 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
323 and cytosine methylation status in chemically pretreated genomic DNA. The
324 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
325 range of diseases including immune system, gastrointestinal, respiratory,
326 central nervous system, cardiovascular and metabolic disorders. The
327 oligomers are also used for detecting cell type differentiation. ABC00010
328 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
329 represent the oligomers described in the invention. NOTE: The sequence
330 data for this patent did not form part of the printed specification, but
331 was obtained in electronic format from WIPO at
332 ftp.wipo.int/pub/published_pct_sequences
333
334 XX Sequence 13 BP; 6 A; 0 C; 5 G; 1 T; 0 U; 1 Other;
335
336 Query Match 13.7%; Score 10; DB 1; Length 13;
337 Best Local Similarity 83.3%; Pred. No. 1e+03;
338 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
339
340 QY 908 TTTCTTTGGTC 919
341 ||||| |||||
342 2 TTTTCTTGGTY 13
343
344 Db 2 TTTTCTTGGTY 13
345
346 RESULT 834
347 ABC30230/C
348 ID ABC30230 standard; DNA; 13 BP.
349
350 XX AC ABC30230;
351
352 XX AC ABC30230;
353
354 DT 20-FEB-2002 (first entry)
355
356 XX Oligonucleotide SEQ ID NO 30247 for detecting SNP TSC0009193.
357
358 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
359 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
360 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
361
362 XX Homo sapiens.
363
364 XX WO200177384-A2.
365
366 XX 18-OCT-2001.
367
368 PF 06-APR-2001; 2001WO-IB000713.
369
370 XX 07-APR-2000; 2000DE-01019173.
371
372 PR (EPIG-) EPIGENOMICS AG.
373
374 XX Olek A, Piepenbrock C, Berlin K;
375
376 PI WPI; 2001-657177/75.
377
378 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
379 designed to detect single-nucleotide polymorphisms and cytosine
380 methylation status.
381
382 XX Claim 1; SEQ ID NO 30247; 29pp + Sequence Listing; German.
383
384 This invention describes novel oligonucleotide primers or peptide nucleic
385 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
386 and cytosine methylation status in chemically pretreated genomic DNA. The
387 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
388 range of diseases including immune system, gastrointestinal, respiratory,
389 central nervous system, cardiovascular and metabolic disorders. The
390 oligomers are also used for detecting cell type differentiation. ABC00010
391 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
392 represent the oligomers described in the invention. NOTE: The sequence
393 data for this patent did not form part of the printed specification, but
394 was obtained in electronic format from WIPO at
395 ftp.wipo.int/pub/published_pct_sequences
396
397 XX Sequence 13 BP; 6 A; 0 C; 5 G; 1 T; 0 U; 1 Other;
398
399 Query Match 13.7%; Score 10; DB 1; Length 13;
400 Best Local Similarity 83.3%; Pred. No. 1e+03;
401 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
402
403 QY 908 TTTCTTTGGTC 919
404 ||||| |||||
405 2 TTTTCTTGGTY 13
406
407 Db 2 TTTTCTTGGTY 13
408
409 RESULT 834
410 ABC30230/C
411 ID ABC30230 standard; DNA; 13 BP.
412
413 XX AC ABC30230;
414
415 XX AC ABC30230;
416
417 DT 20-FEB-2002 (first entry)
418
419 XX Oligonucleotide SEQ ID NO 30247 for detecting SNP TSC0009193.
420
421 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
422 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
423 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
424
425 XX Homo sapiens.
426
427 XX WO200177384-A2.
428
429 XX 18-OCT-2001.
430
431 PF 06-APR-2001; 2001WO-IB000713.
432
433 XX 07-APR-2000; 2000DE-01019173.
434
435 PR (EPIG-) EPIGENOMICS AG.
436
437 XX Olek A, Piepenbrock C, Berlin K;
438
439 PI WPI; 2001-657177/75.
440
441 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
442 designed to detect single-nucleotide polymorphisms and cytosine
443 methylation status.
444
445 XX Claim 1; SEQ ID NO 30247; 29pp + Sequence Listing; German.
446
447 This invention describes novel oligonucleotide primers or peptide nucleic
448 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
449 and cytosine methylation status in chemically pretreated genomic DNA. The
450 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
451 range of diseases including immune system, gastrointestinal, respiratory,
452 central nervous system, cardiovascular and metabolic disorders. The
453 oligomers are also used for detecting cell type differentiation. ABC00010
454 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
455 represent the oligomers described in the invention. NOTE: The sequence
456 data for this patent did not form part of the printed specification, but
457 was obtained in electronic format from WIPO at
458 ftp.wipo.int/pub/published_pct_sequences
459
460 XX Sequence 13 BP; 6 A; 0 C; 5 G; 1 T; 0 U; 1 Other;
461
462 Query Match 13.7%; Score 10; DB 1; Length 13;
463 Best Local Similarity 83.3%; Pred. No. 1e+03;
464 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
465
466 QY 908 TTTCTTTGGTC 919
467 ||||| |||||
468 2 TTTTCTTGGTY 13
469
470 Db 2 TTTTCTTGGTY 13
471
472 RESULT 834
473 ABC30230/C
474 ID ABC30230 standard; DNA; 13 BP.
475
476 XX AC ABC30230;
477
478 XX AC ABC30230;
479
480 DT 20-FEB-2002 (first entry)
481
482 XX Oligonucleotide SEQ ID NO 30247 for detecting SNP TSC0009193.
483
484 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
485 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
486 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
487
488 XX Homo sapiens.
489
490 XX WO200177384-A2.
491
492 XX 18-OCT-2001.
493
494 PF 06-APR-2001; 2001WO-IB000713.
495
496 XX 07-APR-2000; 2000DE-01019173.
497
498 PR (EPIG-) EPIGENOMICS AG.
499
500 XX Olek A, Piepenbrock C, Berlin K;
501
502 PI WPI; 2001-657177/75.
503
504 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
505 designed to detect single-nucleotide polymorphisms and cytosine
506 methylation status.
507
508 XX Claim 1; SEQ ID NO 30247; 29pp + Sequence Listing; German.
509
510 This invention describes novel oligonucleotide primers or peptide nucleic
511 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
512 and cytosine methylation status in chemically pretreated genomic DNA. The
513 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
514 range of diseases including immune system, gastrointestinal, respiratory,
515 central nervous system, cardiovascular and metabolic disorders. The
516 oligomers are also used for detecting cell type differentiation. ABC00010
517 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
518 represent the oligomers described in the invention. NOTE: The sequence
519 data for this patent did not form part of the printed specification, but
520 was obtained in electronic format from WIPO at
521 ftp.wipo.int/pub/published_pct_sequences
522
523 XX Sequence 13 BP; 6 A; 0 C; 5 G; 1 T; 0 U; 1 Other;
524
525 Query Match 13.7%; Score 10; DB 1; Length 13;
526 Best Local Similarity 83.3%; Pred. No. 1e+03;
527 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
528
529 QY 908 TTTCTTTGGTC 919
530 ||||| |||||
531 2 TTTTCTTGGTY 13
532
533 Db 2 TTTTCTTGGTY 13
534
535 RESULT 834
536 ABC30230/C
537 ID ABC30230 standard; DNA; 13 BP.
538
539 XX AC ABC30230;
540
541 XX AC ABC30230;
542
543 DT 20-FEB-2002 (first entry)
544
545 XX Oligonucleotide SEQ ID NO 30247 for detecting SNP TSC0009193.
546
547 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
548 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
549 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
550
551 XX Homo sapiens.
552
553 XX WO200177384-A2.
554
555 XX 18-OCT-2001.
556
557 PF 06-APR-2001; 2001WO-IB000713.
558
559 XX 07-APR-2000; 2000DE-01019173.
560
561 PR (EPIG-) EPIGENOMICS AG.
562
563 XX Olek A, Piepenbrock C, Berlin K;
564
565 PI WPI; 2001-657177/75.
566
567 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
568 designed to detect single-nucleotide polymorphisms and cytosine
569 methylation status.
570
571 XX Claim 1; SEQ ID NO 30247; 29pp + Sequence Listing; German.
572
573 This invention describes novel oligonucleotide primers or peptide nucleic
574 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
575 and cytosine methylation status in chemically pretreated genomic DNA. The
576 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
577 range of diseases including immune system, gastrointestinal, respiratory,
578 central nervous system, cardiovascular and metabolic disorders. The
579 oligomers are also used for detecting cell type differentiation. ABC00010
580 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
581 represent the oligomers described in the invention. NOTE: The sequence
582 data for this patent did not form part of the printed specification, but
583 was obtained in electronic format from WIPO at
584 ftp.wipo.int/pub/published_pct_sequences
585
586 XX Sequence 13 BP; 6 A; 0 C; 5 G; 1 T; 0 U; 1 Other;
587
588 Query Match 13.7%; Score 10; DB 1; Length 13;
589 Best Local Similarity 83.3%; Pred. No. 1e+03;
590 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
591
592 QY 908 TTTCTTTGGTC 919
593 ||||| |||||
594 2 TTTTCTTGGTY 13
595
596 Db 2 TTTTCTTGGTY 13
597
598 RESULT 834
599 ABC30230/C
600 ID ABC30230 standard; DNA; 13 BP.
601
602 XX AC ABC30230;
603
604 XX AC ABC30230;
605
606 DT 20-FEB-2002 (first entry)
607
608 XX Oligonucleotide SEQ ID NO 30247 for detecting SNP TSC0009193.
609
610 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
611 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
612 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
613
614 XX Homo sapiens.
615
616 XX WO200177384-A2.
617
618 XX 18-OCT-2001.
619
620 PF 06-APR-2001; 2001WO-IB000713.
621
622 XX 07-APR-2000; 2000DE-01019173.
623
624 PR (EPIG-) EPIGENOMICS AG.
625
626 XX Olek A, Piepenbrock C, Berlin K;
627
628 PI WPI; 2001-657177/75.
629
630 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
631 designed to detect single-nucleotide polymorphisms and cytosine
632 methylation status.
633
634 XX Claim 1; SEQ ID NO 30247; 29pp + Sequence Listing; German.
635
636 This invention describes novel oligonucleotide primers or peptide nucleic
637 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
638 and cytosine methylation status in chemically pretreated genomic DNA. The
639 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
640 range of diseases including immune system, gastrointestinal, respiratory,
641 central nervous system, cardiovascular and metabolic disorders. The
642 oligomers are also used for detecting cell type differentiation. ABC00010
643 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
644 represent the oligomers described in the invention. NOTE: The sequence
645 data for this patent did not form part of the printed specification, but
646 was obtained in electronic format from WIPO at
647 ftp.wipo.int/pub/published_pct_sequences
648
649 XX Sequence 13 BP; 6 A; 0 C; 5 G; 1 T; 0 U; 1 Other;
650
651 Query Match 13.7%; Score 10; DB 1; Length 13;
652 Best Local Similarity 83.3%; Pred. No. 1e+03;
653 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
654
655 QY 908 TTTCTTTGGTC 919
656 ||||| |||||
657 2 TTTTCTTGGTY 13
658
659 Db 2 TTTTCTTGGTY 13
660
661 RESULT 834
662 ABC30230/C
663 ID ABC30230 standard; DNA; 13 BP.
664
665 XX AC ABC30230;
666
667 XX AC ABC30230;
668
669 DT 20-FEB-2002 (first entry)
670
671 XX Oligonucleotide SEQ ID NO 30247 for detecting SNP TSC0009193.
672
673 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
674 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
675 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
676
677 XX Homo sapiens.
678
679 XX WO200177384-A2.
680
681 XX 18-OCT-2001.
682
683 PF 06-APR-2001; 2001WO-IB000713.
684
685 XX 07-APR-2000; 2000DE-01019173.
686
687 PR (EPIG-) EPIGENOMICS AG.
688
689 XX Olek A, Piepenbrock C, Berlin K;
690
691 PI WPI; 2001-657177/75.
692
693 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
694 designed to detect single-nucleotide polymorphisms and cytosine
695 methylation status.
696
697 XX Claim 1; SEQ ID NO 30247; 29pp + Sequence Listing; German.
698
699 This invention describes novel oligonucleotide primers or peptide nucleic
700 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
701 and cytosine methylation status in chemically pretreated genomic DNA. The
702 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
703 range of diseases including immune system, gastrointestinal, respiratory,
704 central nervous system, cardiovascular and metabolic disorders. The
705 oligomers are also used for detecting cell type differentiation. ABC00010
706 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
707 represent the oligomers described in the invention. NOTE: The sequence
708 data for this patent did not form part of the printed specification, but
709 was obtained in electronic format from WIPO at
710 ftp.wipo.int/pub/published_pct_sequences
711
712 XX Sequence 13 BP; 6 A; 0 C; 5 G; 1 T; 0 U; 1 Other;
713
714 Query Match 13.7%; Score 10; DB 1; Length 13;
715 Best Local Similarity 83.3%; Pred. No. 1e+03;
716 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
717
718 QY 908 TTTCTTTGGTC 919
719 ||||| |||||
720 2 TTTTCTTGGTY 13
721
722 Db 2 TTTTCTTGGTY 13
723
724 RESULT 834
725 ABC30230/C
726 ID ABC30230 standard; DNA; 13 BP.
727
728 XX AC ABC30230;
729
730 XX AC ABC30230;
731
732 DT 20-FEB-2002 (first entry)
733
734 XX Oligonucleotide SEQ ID NO 30247 for detecting SNP TSC0009193.
735
736 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
737 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
738 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
739
740 XX Homo sapiens.
741
742 XX WO200177384-A2.
743
744 XX 18-OCT-2001.
745
746 PF 06-APR-2001; 2001WO-IB000713.
747
748 XX 07-APR-2000; 2000DE-01019173.
749
750 PR (EPIG-) EPIGENOMICS AG.
751
752 XX Olek A, Piepenbrock C, Berlin K;
753
754 PI WPI; 2001-657177/75.
755
756 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
757 designed to detect single-nucleotide polymorphisms and cytosine
758 methylation status.
759
760 XX Claim 1; SEQ ID NO 30247; 29pp + Sequence Listing; German.
761
762 This invention describes novel oligonucleotide primers or peptide nucleic
763 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
764 and cytosine methylation status in chemically pretreated genomic DNA. The
765 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
766 range of diseases including immune system, gastrointestinal, respiratory,
767 central nervous system, cardiovascular and metabolic disorders. The
768 oligomers are also used for detecting cell type differentiation. ABC00010
769 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
770 represent the oligomers described in the invention. NOTE: The sequence
771 data for this patent did not form part of the printed specification, but
772 was obtained in electronic format from WIPO at
773 ftp.wipo.int/pub/published_pct_sequences
774
775 XX Sequence 13 BP; 6 A; 0 C; 5 G; 1 T; 0 U; 1 Other;
776
777 Query Match 13.7%; Score 10; DB 1; Length 13;
778 Best Local Similarity 83.3%; Pred. No. 1e+03;
779 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
780
781 QY 908 TTTCTTTGGTC 919
782 ||||| |||||
783 2 TTTTCTTGGTY 13
784
785 Db 2 TTTTCTTGGTY 13
786
787 RESULT 834
788 ABC30230/C
789 ID ABC30230 standard; DNA; 13 BP.
790
791 XX AC ABC30230;
792
793 XX AC ABC30230;
794
795 DT 20-FEB-2002 (first entry)
796
797 XX Oligonucleotide SEQ ID NO 30247 for detecting SNP TSC0009193.
798
799 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
800 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
801 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
802
803 XX Homo sapiens.
804
805 XX WO200177384-A2.
806
807 XX 18-OCT-2001.
808
809 PF 06-APR-2001; 2001WO-IB000713.
810
811 XX 07-APR-2000; 2000DE-01019173.
812
813 PR (EPIG-) EPIGENOMICS AG.
814
815 XX Olek A, Piepenbrock C, Berlin K;
816
817 PI WPI; 2001-657177/75.
818
819 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
820 designed to detect single-nucleotide polymorphisms and cytosine
821 methylation status.
822
823 XX Claim 1; SEQ ID NO 30247; 29pp + Sequence Listing; German.
824
825 This invention describes novel oligonucleotide primers or peptide nucleic
826 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
827 and cytosine methylation status in chemically pretreated genomic DNA. The
828 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
829 range of diseases including immune system, gastrointestinal, respiratory,
830 central nervous system, cardiovascular and metabolic disorders. The
831 oligomers are
```

```

Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 923 GCCTTTTATCC 934
Db :|||||||
13 RCCTTTTATCTC 2

RESULT 835
ABC55956
ID ABC55956 standard; DNA; 13 BP.
XX
AC ABC55956;
XX
XX 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 55973 for detecting SNP TSC0015229.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 55973 for detecting SNP TSC0015229.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 55973; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 4 A; 0 C; 1 G; 8 T; 0 U; 0 Other;
XX
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 948 TTTAATGTAT 957
Db :|||||||
2 TTTAATGTAT 11

RESULT 836
ABC63811
ID ABC63811 standard; DNA; 13 BP.
XX
XX ABC63811;
XX

```

```

XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 63828 for detecting SNP TSC0016855.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 63828; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 3 A; 3 C; 0 G; 7 T; 0 U; 0 Other;
XX
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 926 TTTTATCCCT 935
Db :|||||||
2 TTTTATCCCT 11

RESULT 837
ABF18584
ID ABF18584 standard; DNA; 13 BP.
XX
XX ABF18584;
XX
XX 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 118581 for detecting SNP TSC0029619.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX

```

```

18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 118581; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 3 A; 0 C; 1 G; 9 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03; 0; Indels 0; Gaps 0;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
948 TTTAATGTAT 957
1 TTTAATGTAT 10
|||||
3
RESULT 838
9F32038
ABF32038 standard; DNA; 13 BP.
ABF32038;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 132035 for detecting SNP TSC0032957.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 132035; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 2 A; 0 C; 2 G; 8 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03; 0; Indels 0; Gaps 0;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
944 TTGGTTTAAAT 953
2 TTGGTTTAAAT 11
|||||
Db
944 TTGGTTTAAAT 953
2 TTGGTTTAAAT 11
|||||
RESULT 839
ABF70152
ID ABF70152 standard; DNA; 13 BP.
AC ABF70152;
XX
XX
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 170149 for detecting SNP TSC0042480.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 170149; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

```



CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences

XX SEQ Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CY 948 TTTAATGTAT 957

|||||  
Db 2 TTTAATGTAT 11

RESULT 840  
ABF74917/C  
ID ABF74917 standard; DNA; 13 BP.

AC ABF74917;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 174914 for detecting SNP TSC0043493.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.

XX Claim 1; SEQ ID NO 174914; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences

XX SEQ Sequence 13 BP; 8 A; 1 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CY 948 TTTAATGTAT 957

|||||

Db 13 TTTAATGTAT 4

RESULT 841

ABH04672/C

ID ABH04672 standard; DNA; 13 BP.

XX ABH04672;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 204649 for detecting SNP TSC0050210.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.

XX Claim 1; SEQ ID NO 204649; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences

XX SEQ Sequence 13 BP; 7 A; 0 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CY 905 TCATTTCCTT 914

|||||

Db 13 TCATTTCCTT 4

RESULT 842

ABF82790

ID ABF82790 standard; DNA; 13 BP.

XX ABF82790;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 182787 for detecting SNP TSC0045166.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

Claim 1; SEQ ID NO 182787; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-AB099989, AB00010-AB099989, AB00010-AB099989 and AB00010-AB082073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 2 A; 1 C; 2 G; 7 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 83.3%; Pred. No. 1e+03;  
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

920 TTTCGCTTTTAT 931

|||||

2 TTTCGCTTTTAY 13

SULT 843

AB54690

AB54690 standard; DNA; 13 BP.

AB54690;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 254667 for detecting SNP TSC0062076.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

XX

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

Claim 1; SEQ ID NO 254667; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-AB099989, AB00010-AB099989, AB00010-AB099989 and AB00010-AB082073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 4 A; 0 C; 1 G; 7 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 948 TTTAATGTAT 957

|||||

1 TTTAATGTAT 10

RESULT 844

ABH61066

ID ABH61066 standard; DNA; 13 BP.

AC ABH61066;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 261043 for detecting SNP TSC0063384.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

Claim 1; SEQ ID NO 261043; 29pp + Sequence Listing; German.

XX

CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX

SQ Sequence 13 BP; 4 A; 0 C; 4 G; 5 T; 0 U; 0 Other;  
Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 943 ATTGGTTTAA 952  
D5 4 ATTGGTTTAA 13  
|||||

RESULT 845  
ABC30231  
ID ABC30231 standard; DNA; 13 BP.  
XX  
AC ABC30231;  
XX  
DT 20-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 30248 for detecting SNP TSC0009193.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
PN WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 30248; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX

SQ Sequence 13 BP; 1 A; 5 C; 0 G; 6 T; 0 U; 1 Other;  
Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 83.3%; Pred. No. 1e+03;  
Matches 10; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 923 GCCTTTATCCC 934  
D5 1 RCCTTTATCTC 12  
|||||

RESULT 846  
ABC31894  
ID ABC31894 standard; DNA; 13 BP.  
XX  
AC ABC31894;  
XX  
DT 20-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 31911 for detecting SNP TSC0009939.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
PN WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 31911; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX

SQ Sequence 13 BP; 3 A; 0 C; 4 G; 5 T; 0 U; 1 Other;  
Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 945 TGCTTTAATG 954  
D5 2 TGCTTTAATG 11  
|||||

RESULT 847  
ABC31895/c

```

ABC31895 standard; DNA; 13 BP.
ABC31895;
20-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 31912 for detecting SNP TSC0009939.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 31912; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABR00010-ABR2073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 5 A; 4 C; 0 G; 3 T; 0 U; 1 Other;
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABR00010-ABR2073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 5 A; 4 C; 0 G; 3 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
945 TGGTTTAATG 954
|||||||
12 TGGTTTAATG 3
SULT 848
BF94203/C
ABF94203 standard; DNA; 13 BP.
ABF94203;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 194200 for detecting SNP TSC0047758.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 194200; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABR00010-ABR2073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 8 A; 1 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
948 TTTAATGAT 957
|||||||
12 TTTAATGAT 3
RESULT 849
ABF72022
ID ABF72022 standard; DNA; 13 BP.
XX
AC ABF72022;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 172019 for detecting SNP TSC0042890.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
PA (EPIG-) EPIGENOMICS AG.
PI Olek A, Piepenbrock C, Berlin K;
XX

```

DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
FS Claim 1; SEQ ID NO 172019; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 5 A; 0 C; 1 G; 7 T; 0 U; 0 Other;  
Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
CY 948 TTTAATGTAT 957  
Db 1 TTTAATGTAT 10  
|||||  
RESULT 850  
ABF72023/C  
ID ABF72023 standard; DNA; 13 BP.  
XX  
AC ABF72023;  
XX  
XX 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 172020 for detecting SNP TSC0042890.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX  
FS Claim 1; SEQ ID NO 172020; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,

CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 7 A; 1 C; 0 G; 5 T; 0 U; 0 Other;  
Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 948 TTTAATGTAT 957  
Db 13 TTTAATGTAT 4  
|||||  
RESULT 851  
ABH23312  
ID ABH23312 standard; DNA; 13 BP.  
XX  
XX ABH23312;  
XX  
XX 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 223289 for detecting SNP TSC0005484.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX  
FS Claim 1; SEQ ID NO 223289; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 3 A; 0 C; 2 G; 7 T; 0 U; 1 Other;  
Query Match 13.7%; Score 10; DB 1; Length 13;  
Best Local Similarity 83.3%; Pred. No. 1e+03;  
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```

      907 ATTTCCTTGCT 918
      ||||| |||||
      2 ATTTCATTGGY 13
      ||||| |||||
      347962
      347962
      ) ABH47962 standard; DNA; 13 BP.
      )
      ) ABH47962;
      )
      ) 22-FEB-2002 (first entry)
      )
      ) Oligonucleotide SEQ ID NO 247939 for detecting SNP TSC0009360.
      )
      ) SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
      ) peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
      ) central nervous system; gastrointestinal; respiratory; immune; metabolic.
      )
      ) Homo sapiens.
      )
      ) WO200177384-A2.
      )
      ) 18-OCT-2001.
      )
      ) 06-APR-2001; 2001WO-IB000713.
      )
      ) 07-APR-2000; 2000DE-01019173.
      )
      ) (EPIG-) EPIGENOMICS AG.
      )
      ) Olek A, Piepenbrock C, Berlin K;
      )
      ) WPI; 2001-657177/75.
      )
      ) Set of oligonucleotides, useful for diagnosis and cell typing, is
      ) designed to detect single-nucleotide polymorphisms and cytosine
      ) methylation status.
      )
      ) Claim 1; SEQ ID NO 247939; 29pp + Sequence Listing; German.
      )
      ) This invention describes novel oligonucleotide primers or peptide nucleic
      ) acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
      ) and cytosine methylation status in chemically pretreated genomic DNA. The
      ) oligonucleotides are used for diagnosis and/or prognosis of cancer and a
      ) range of diseases including immune system, gastrointestinal, respiratory,
      ) central nervous system, cardiovascular and metabolic disorders. The
      ) oligomers are also used for detecting cell type differentiation. ABC00010
      ) -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
      ) represent the oligomers described in the invention. NOTE: The sequence
      ) data for this patent did not form part of the printed specification, but
      ) was obtained in electronic format from WIPO at
      ) ftp.wipo.int/pub/published_pct_sequences
      )
      ) Sequence 13 BP; 4 A; 0 C; 1 G; 7 T; 0 U; 1 Other;
      )
      ) Query Match 13.7%; Score 10; DB 1; Length 13;
      ) Best Local Similarity 100.0%; Pred. No. 1e+03; 0; Indels 0; Gaps 0;
      ) Matches 10; Conservative 0; Mismatches 0;
      )
      ) 948 TTTAATGTAT 957
      ) ||||| |||||
      ) 2 TTTAATGTAT 11
      )
      )
      ) 347962
      ) 3C20522/c
      ) ) ABC20522 standard; DNA; 13 BP.
      )
      ) ) ABC20522;
      )
      ) ) 20-FEB-2002 (first entry)
      )

```

```

XX DE Oligonucleotide SEQ ID NO 20539 for detecting SNP TSC0004187.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX XX WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX XX (EPIG-) EPIGENOMICS AG.
XX
XX XX Olek A, Piepenbrock C, Berlin K;
XX
XX XX WPI; 2001-657177/75.
XX
XX XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX
XX XX Claim 1; SEQ ID NO 20539; 29pp + Sequence Listing; German.
XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 5 A; 0 C; 6 G; 1 T; 0 U; 1 Other;
XX
XX Query Match 13.7%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1e+03; 0; Indels 0; Gaps 0;
XX Matches 10; Conservative 0; Mismatches 0;
XX
XX QY 935 TCCTCTTCAT 944
XX ||||| |||||
XX Db 12 TCCTCTTCAT 3
XX
XX RESULT 854
XX ABF01377/c
XX ID ABF01977 standard; DNA; 13 BP.
XX
XX AC ABF01977;
XX
XX XX 21-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 101974 for detecting SNP TSC0025398.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX XX WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX

```

EP 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 101974; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX

XX Sequence 13 BP; 8 A; 1 C; 0 G; 4 T; 0 U; 0 Other;  
 Query Match 13.7%; Score 10; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 1e+03; Indels 0; Gaps 0;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 948 TTTAATGTAT 957  
 Do 13 TTTAATGTAT 4  
 |||||  
 |||||

RESULT 855  
 ABF02348/C  
 ID ABF02348 standard; DNA; 13 BP.  
 AC ABF02348;  
 XX 21-FEB-2002 (first entry)  
 XX Oligonucleotide SEQ ID NO 102345 for detecting SNP TSC0025524.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

XX Claim 1; SEQ ID NO 102345; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX

XX Sequence 13 BP; 9 A; 0 C; 2 G; 1 T; 0 U; 1 Other;  
 Query Match 13.7%; Score 10; DB 1; Length 13;  
 Best Local Similarity 83.3%; Pred. No. 1e+03; Indels 0; Gaps 0;  
 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 904 GTCATTTCTTT 915  
 Db 13 RTTATTTCTTT 2  
 :|||  
 :|||

RESULT 856  
 ABF09012  
 ID ABF09012 standard; DNA; 13 BP.  
 AC ABF09012;  
 XX 21-FEB-2002 (first entry)  
 XX Oligonucleotide SEQ ID NO 109009 for detecting SNP TSC0027286.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

XX Claim 1; SEQ ID NO 109009; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but

was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 3 A; 0 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;

Best Local Similarity 100.0%; Pred. No. 1e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

948 TTTAATGAT 957

|||||

3 TTTAATGAT 12

RESULT 857

ABF35912 standard; DNA; 13 BP.

ABF35912;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 135909 for detecting SNP TSC0033934.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is

designed to detect single-nucleotide polymorphisms and cytosine

methylation status.

Claim 1; SEQ ID NO 135909; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

and cytosine methylation status in chemically pretreated genomic DNA. The

oligonucleotides are used for diagnosis and/or prognosis of cancer and a

range of diseases including immune system, gastrointestinal, respiratory,

central nervous system, cardiovascular and metabolic disorders. The

oligonucleotides are also used for detecting cell type differentiation. ABC00010

-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073

represent the oligomers described in the invention. NOTE: The sequence

data for this patent did not form part of the printed specification, but

was obtained in electronic format from WIPO at

ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 4 A; 0 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;

Best Local Similarity 100.0%; Pred. No. 1e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

947 GTTAAATGTA 956

|||||

1 GTTAAATGTA 10

RESULT 858

ABH18304/c

ABH18304 standard; DNA; 13 BP.

XX

AC ABH18304;

XX

DT 22-FEB-2002 (first entry)

XX

DE Oligonucleotide SEQ ID NO 218281 for detecting SNP TSC0053061.

XX

KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX

OS Homo sapiens.

XX

PN WO200177384-A2.

XX

PD 18-OCT-2001.

XX

PF 06-APR-2001; 2001WO-IB000713.

XX

PR 07-APR-2000; 2000DE-01019173.

XX

PA (EPIG-) EPIGENOMICS AG.

XX

PI Olek A, Piepenbrock C, Berlin K;

XX

DR WPI; 2001-657177/75.

XX

PT Set of oligonucleotides, useful for diagnosis and cell typing, is

designed to detect single-nucleotide polymorphisms and cytosine

methylation status.

XX

PS Claim 1; SEQ ID NO 218281; 29pp + Sequence Listing; German.

XX

CC This invention describes novel oligonucleotide primers or peptide nucleic

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

and cytosine methylation status in chemically pretreated genomic DNA. The

oligonucleotides are used for diagnosis and/or prognosis of cancer and a

range of diseases including immune system, gastrointestinal, respiratory,

central nervous system, cardiovascular and metabolic disorders. The

oligonucleotides are also used for detecting cell type differentiation. ABC00010

-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073

represent the oligomers described in the invention. NOTE: The sequence

data for this patent did not form part of the printed specification, but

was obtained in electronic format from WIPO at

ftp.wipo.int/pub/published\_pct\_sequences

XX

SQ Sequence 13 BP; 7 A; 0 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;

Best Local Similarity 100.0%; Pred. No. 1e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 906 CATTTCCTTT 915

|||||

12 CATTTCCTTT 3

DB

RESULT 859

ABF97924/c

ID ABF97924 standard; DNA; 13 BP.

XX

AC ABF97924;

XX

DT 22-FEB-2002 (first entry)

XX

DE Oligonucleotide SEQ ID NO 197921 for detecting SNP TSC0048708.

XX

KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

XX





comprises adding a sample containing double-stranded DNA test sequences, e.g. containing the present sequence, to an aqueous medium containing at least one complex of anchor DNA, attached to a solid support, and reporter DNA, where either a part of the anchor DNA or reporter DNA is designed to form a triple-strand structure with part of the test sequence. Triplex formation results in displacement of the reporter DNA which is detected as an indication of the presence of the DNA test sequence. The method is used to detect DNA sequences, particularly for identification of bacteria (by detecting genes for ribosomal RNA) in clinical samples, but also detection of oncogenes and Hepatitis B virus

Sequence 14 BP; 1 A; 6 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 14;  
Best Local Similarity 100.0%; Pred. No. 1.1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 935 TCCTCTTCAT 944  
DB 2 TCCTCTTCAT 11  
|||||

RESULT 862  
X14810  
AAH76180 standard; DNA; 14 BP.

AAH76180;

24-MAR-1999 (first entry)

Triple helix forming nucleotides 274-287 of Hepatitis B virus.

Triple-helix forming region; Triplex formation; DNA detection; identification; Bacteria; oncogene; virus; ds.

Hepatitis B virus.

US5861244-A.

19-JAN-1999.

22-DEC-1993; 93US-00173489.

29-OCT-1992; 92US-00968436.

(PROF-) PROFILE DIAGNOSTIC SCI INC.

Hepburn AG, Wang C;

WPI; 1999-130384/11.

Assay of genetic sequences based on triplex formation from double stranded analyte - and hybrid of anchor and reporter sequences, with reporter released if triplex formation occurs, used e.g. to identify bacteria.

Disclosure; Col 19-20; 168pp; English.

The present sequence represents a potential triple-helix forming region. It can be used to demonstrate the assay of the invention. The assay comprises adding a sample containing double-stranded DNA test sequences, e.g. containing the present sequence, to an aqueous medium containing at least one complex of anchor DNA, attached to a solid support, and reporter DNA, where either a part of the anchor DNA or reporter DNA is designed to form a triple-strand structure with part of the test sequence. Triplex formation results in displacement of the reporter DNA which is detected as an indication of the presence of the DNA test sequence. The method is used to detect DNA sequences, particularly for identification of bacteria (by detecting genes for ribosomal RNA) in clinical samples, but also detection of oncogenes and Hepatitis B virus

Sequence 14 BP; 1 A; 6 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 14;  
Best Local Similarity 100.0%; Pred. No. 1.1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 935 TCCTCTTCAT 944  
DB 2 TCCTCTTCAT 11  
|||||

RESULT 863  
AAH76180/c  
ID AAH76180 standard; DNA; 14 BP.

AAH76180;

29-OCT-2001 (first entry)

Region of ALC locus after Ds insertion.

SGT10166; dehiscence; indehiscent; pod shattering; agronomic; transgenic; ALC locus; ss.

Arabidopsis thaliana.

WO200159122-A1.

16-AUG-2001.

01-FEB-2001; 2001WO-SG000017.

11-FEB-2000; 2000WO-SG000022.

(MOLE-) INST MOLECULAR AGROBIOLOGY.

Sundaresan V, Rajani S;

WPI; 2001-514672/56.

New gene from Arabidopsis thaliana involved in dehiscence and mutations in the gene which prevents dehiscence of mature fruit in plants, useful for producing indehiscent transgenic plants.

Example 4; Fig 5; 74pp; English.

The invention relates to the STG10166 polypeptide from A. thaliana.

Mutations in SGT10166 gene prevent dehiscence of mature fruit. A recombinant SGT10166 DNA molecule is capable of altering dehiscence of a mature fruit in plants which produce seed pods, by antisense or sense suppression mechanism and is useful for producing indehiscent transgenic plants. SGT10166 gene is useful for screening genomic DNA of plants having seed pods to identify homologous genes, which provide additional nucleic acids for use in inhibiting dehiscence which leads to significant seed loss during harvesting of crops. This is of agronomic importance in crops such as oil seed rape (Brassica napus). Prokaryotic or eukaryotic cells transformed with the polynucleotides are useful for producing SGT10166 polypeptides and in studying the characteristics of SGT10166 polypeptides. Plants having modified dehiscence phenotypes can be used as model systems for further study of the formation and differentiation of fruit tissue in plants. The probes and primers based on the SGT10166 gene sequence are useful for identifying genes and proteins homologous to SGT10166 in other species. These gene sequences and proteins are useful in diagnostic/prognostic methods, such as predicting reproductive phenotype in transgenic plants and genetic engineering methods for the species from which they have been isolated. Agronomic and selectable marker genes can be operably linked to SGT10166 regulatory sequences and expressed in transformed plants to express various phenotypes of agronomic interest. The present sequence represents a region of ALC locus after Ds insertion

Sequence 14 BP; 5 A; 2 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 14;  
Best Local Similarity 100.0%; Pred. No. 1.1e+03;



The concentration of ribozyme required to affect a therapeutic treatment is lower than that required of antisense molecules, and is highly specific. The present sequence is used in the exemplification of the present invention

Sequence 15 BP; 0 A; 4 C; 5 G; 0 T; 6 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 15;  
Best Local Similarity 50.0%; Pred. No. 1.1e+03;  
Matches 5; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

917 GTCCTTGCCCT 926  
|:|:|:|:|:  
4 GUCUUGCCU 13

RESULT 866  
X66763  
AAAX66763 standard; RNA; 15 BP.  
AAAX66763;

20-JUL-1999 (first entry)

Mouse CD40 hammerhead ribozyme target SEQ ID NO:3395.

Arthritic condition; graft tolerance; immune response; target; cleavage;  
hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;  
stromelysin; synovial membrane; joint; arthritis; osteoarthritis;  
rheumatoid arthritis; autoimmune disease; allergy; inflammation;  
diagnosis; ss.

Mus sp.

WO9618736-A2.

20-JUN-1996.

22-NOV-1995; 95WO-US015516.

13-DEC-1994; 94US-00354920.  
23-DEC-1994; 94US-00363253.  
23-DEC-1994; 94US-00363254.  
17-FEB-1995; 95US-00390850.  
20-APR-1995; 95US-00426124.  
02-MAY-1995; 95US-00432874.  
04-MAY-1995; 95US-00434509.  
07-JUL-1995; 95US-0000951P.  
07-JUL-1995; 95US-0000974P.  
07-AUG-1995; 95US-00512861.  
05-OCT-1995; 95US-00541365.

(RIBO-) RIBOZYME PHARM INC.

Beigelman I, Stinchcomb DT, Jarvis T, Draper K, Pavco P;  
McSwiggan J, Gustofson J, Usman N, Wincott F, Matulic-Adamic J;  
Karpeisky A, Thompson JD, Modak A, Burgin A;  
WPI; 1996-300653/30.

Enzymatic nucleic acid molecules having a hammer-head motif - used for the treatment of arthritis, induction of graft tolerance or treatment of auto-immune diseases.

Claim 10; Page 209; 307pp; English.

The present invention describes a novel enzymatic nucleic acid (ENA) having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's can inhibit collagenase and stromelysin production in the synovial membrane of joints for the treatment or prevention of arthritis, particularly osteoarthritis or rheumatoid arthritis. The ENA's can also

CC be used to treat antigen presenting cells of a donor to induce tolerance in a recipient to an alloantigen of a donor. They can also be used for enhancing graft tolerance or for treating autoimmune disease, and for treating allergies and other inflammatory conditions. The ENA's can also be used in diagnosis. Ribozyme therapy impacts on the expression of CC stromelysin without introducing the non-specific effects upon gene CC expression which accompany treatment with retinoids and dexamethasone. CC The concentration of ribozyme required to affect a therapeutic treatment CC is lower than that required of antisense molecules, and is highly CC specific. The present sequence is used in the exemplification of the CC present invention

XX  
SQ Sequence 15 BP; 0 A; 4 C; 5 G; 0 T; 6 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 15;  
Best Local Similarity 50.0%; Pred. No. 1.1e+03;  
Matches 5; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 917 GTCCTTGCCCT 926  
|:|:|:|:|:  
Db 4 GUCUUGCCU 13

RESULT 867  
AAI70480  
ID AAI70480 standard; DNA; 15 BP.  
XX  
AC AAI70480;

21-JAN-2002 (first entry)

Modified oligonucleotide probe.

Probe; hybridisation; array; microarray; mismatch; detection; ss.

Synthetic.

Key	Location/Qualifiers
FT modified_base 1	/tag= a
FT	/label= OTHER
FT	/note= "6-amino-3-prop-1-ynyl-5-hydroxypropazolo (3,4-d)pyrimidine-4-one"
FT modified_base 7	/tag= b
FT	/label= OTHER
FT	/note= "6-amino-3-prop-1-ynyl-5-hydroxypropazolo (3,4-d)pyrimidine-4-one"
FT modified_base 8	/tag= c
FT	/label= OTHER
FT	/note= "6-amino-3-prop-1-ynyl-5-hydroxypropazolo (3,4-d)pyrimidine-4-one"
FT modified_base 9	/tag= d
FT	/label= OTHER
FT	/note= "6-amino-3-prop-1-ynyl-5-hydroxypropazolo (3,4-d)pyrimidine-4-one"
FT modified_base 11	/tag= e
FT	/label= OTHER
FT	/note= "6-amino-3-prop-1-ynyl-5-hydroxypropazolo (3,4-d)pyrimidine-4-one"
XX	
PN	WO200164958-A2.
XX	
PD	07-SEP-2001.
XX	
PF	01-MAR-2001; 2001WO-US006900.
XX	
PR	01-MAR-2000; 2000US-0186046P.
PR	28-NOV-2000; 2000US-00724959.
XX	

PA (EPOC-) EPOCH BIOSCIENCES INC.  
 XX Dempcy RO. Gall AA, Likhov SG, Afonina IA, Singer MJ;  
 PI Kutyavin IV, Vermeulen NMJ;  
 XX  
 DR WPI; 2001-648247/74.  
 XX  
 XX New modified oligonucleotides containing pyrazolo-pyrimidine and/or 5-  
 PT substituted pyrimidine bases, useful as probes or primers in assays,  
 PT especially for mismatch discrimination.  
 XX  
 XX Example 13; Page 87; 116pp; English.  
 XX  
 CC The present sequence is that of an oligonucleotide probe in which 6-amino  
 CC -3-prop-1-ynyl-5-hydroypyrazolo(3,4-d)pyrimidine-4-one (PPG) replaces G.  
 CC This is one of a set of PPG-modified probes (see AAI70465-502) used to  
 CC illustrate the use of an algorithm, described in the specification, to  
 CC predict the Tm of modified oligonucleotides containing PPG both with and  
 CC without a modified groove binder (MGB). In the present case, the accuracy  
 CC of the prediction algorithm was 0.26 and 1.85 degree C for the PPG-  
 CC containing oligonucleotide and the corresponding PPG-containing MGB-  
 CC modified oligonucleotide, respectively. The algorithm allows a collection  
 CC of probe or primer sequences with a desired Tm value to be identified.  
 CC The invention provides modified oligonucleotides for mismatch  
 CC discrimination. It also provides methods for distinguishing related  
 CC polynucleotides, detecting target sequences, sequencing, primer  
 CC extension, for examining gene expression, and for identifying a mutation  
 CC or polymorphism  
 XX  
 SQ Sequence 15 BP; 3 A; 1 C; 0 G; 6 T; 0 U; 5 Other;  
 Query Match 13.7%; Score 10; DB 1; Length 15;  
 Best Local Similarity 71.4%; Pred. No. 1.1e+03;  
 Matches 10; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 940 TTCATTGGTTTAAAT 953  
 Db 2 TTCATNNNTTAAAT 15  
 ||||| |||||  
 ||||| |||||  
 RESULT 868  
 AAS57217/C  
 ID AAS57217 standard; DNA; 15 BP.  
 XX  
 AC AAS57217;  
 XX  
 DT 16-JAN-2002 (first entry)  
 XX  
 DE Human CHRN2 allele specific oligonucleotide (ASO) probe #14.  
 KW Human; cholinergic receptor, nicotinic, beta polypeptide 2; neuronal;  
 KW CHRN2; memory disorder; Alzheimer's disease; epilepsy; learning;  
 KW chromosome 1q21; schizophrenia; attention deficit/hyperactivity disorder;  
 KW ADHD; autosomal dominant nocturnal frontal lobe epilepsy; ADNFLE; ss;  
 KW allele specific oligonucleotide; ASO; probe.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO200174833-A2.  
 EN  
 XX 11-OCT-2001.  
 FD  
 XX  
 XX 03-APR-2001; 2001WO-US010666.  
 XX  
 XX  
 FR 03-APR-2000; 2000US-0194155P.  
 FR 13-JUL-2000; 2000US-0217952P.  
 XX  
 XX (GENA-) GENAISSANCE PHARM INC.  
 FA  
 XX Choi JY, Klem SE, Koshy B, Lee HH, Sanchis A;  
 PI WPI; 2001-626374/72.  
 XX  
 DR  
 XX

PT Genotyping cholinergic receptor, nicotinic, beta-polypeptide 2 gene of an  
 PT individual involves determining for two copies of the gene, the identity  
 PT of nucleotide pair at polymorphic sites selected from P51-24.  
 XX  
 PS Claim 15; Page 14; 82pp; English.  
 XX  
 XX The invention relates to genotyping/haplotyping the cholinergic receptor,  
 CC nicotinic, beta-polypeptide 2 (neuronal) (CHRN2) gene of an individual,  
 CC comprising determining for the two copies of the CHRN2 gene present in  
 CC the individual, the identity of the nucleotide pair at one or more  
 CC polymorphic sites selected from P51-24. Also include are oligonucleotides  
 CC for performing the method and the nucleotide sequence of the polymorphic  
 CC variants of CHRN2. The method is useful for detecting novel CHRN2  
 CC polymorphisms and for determining if an individual has a haplotype or  
 CC haplotype pairs defined in the specification and to validate CHRN2 as a  
 CC candidate agent for treating a specific condition or disease predicted to  
 CC be associated with CHRN2 activity (e.g. a memory disorder, Alzheimer's  
 CC disease, epilepsy, a learning disorder, schizophrenia, attention  
 CC deficit/hyperactivity disorder, (ADHD) and autosomal dominant nocturnal  
 CC frontal lobe epilepsy (ADNFLE)), and in the design of clinical trials of  
 CC candidate drugs for treating a specific condition or disease predicted to  
 CC be associated with CHRN2 activity. The method is useful to screen for  
 CC compounds targeting CHRN2 to treat a specific conditions or disease  
 CC associated with CHRN2 activity. The polymorphic nucleic acids are useful  
 CC in studying the expression and function of CHRN2, and in expressing  
 CC CHRN2 protein for use in screening for candidate drugs to treat diseases  
 CC related to CHRN2 activity and are useful for therapeutic purposes. The  
 CC CHRN2 gene is located on chromosome 1q21. The present sequence is an  
 CC allele specific oligonucleotide (ASO) probe for performing the method of  
 CC the invention  
 XX  
 SQ Sequence 15 BP; 3 A; 0 C; 10 G; 1 T; 0 U; 1 Other;  
 Query Match 13.7%; Score 10; DB 1; Length 15;  
 Best Local Similarity 83.3%; Pred. No. 1.1e+03;  
 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
 QY 931 TCCCTCCTCTTC 942  
 Db 15 TCCCTCCYCTCC 4  
 |||||:|  
 |||||:|  
 RESULT 869  
 AAF48236  
 ID AAF48236 standard; DNA; 15 BP.  
 XX  
 AC AAF48236;  
 XX  
 DT 30-MAR-2001 (first entry)  
 XX  
 DE IGFBP3 oligonucleotide #1656.  
 XX  
 KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO200078341-A1.  
 FN  
 XX 28-DEC-2000.  
 PD  
 XX 21-JUN-2000; 2000WO-AU000693.  
 DF  
 XX 21-JUN-1999; 99US-0140345P.  
 FR  
 XX (MURD-) MURDOCH CHILDRENS RES INST.  
 PA

Wright CJ, Werther GA, Edmondson SR;  
WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 7; Page 54; 20lpp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 0 A; 7 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

932 CCTCTCTCTT 941  
|||||||  
6 CCTCTCTCTT 15

RESULT 870

AAF48243  
AAF48243 standard; DNA; 15 BP.

AAF48243;

30-MAR-2001 (first entry)

IGFBP3 oligonucleotide #1663.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 7; Page 55; 20lpp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 3 A; 5 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 15;

Best Local Similarity 100.0%; Pred. No. 1.1e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

934 CTCCTCTTCA 943

|||||||

1 CTCCTCTTCA 10

RESULT 871

AAF48461/C

AAF48461 standard; DNA; 15 BP.

AAF48461;

30-MAR-2001 (first entry)

IGFBP3 oligonucleotide #1881.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

XX Example 7; Page 56; 201pp; English.

CC The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAP45151 and AAP45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

SQ Sequence 15 BP; 6 A; 2 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 919 CTTTGCCTTT 928  
DQ 11 CTTTGCCTTT 2

RESULT 872  
AAF49427

ID AAF49427 standard; DNA; 15 BP.

AC AAF49427;

AT 30-MAR-2001 (first entry)

DE IGF-I oligonucleotide #387.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

XX Homo sapiens.

OS WO200078341-A1.

PN 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

XX Wright CJ, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

XX Example 8; Page 63; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of

CC skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAP45151 and AAP45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

SQ Sequence 15 BP; 2 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.1e+03;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 899 CCTGTGTCAT 908  
DQ 6 CCTGTGTCAT 15

RESULT 873  
AAF49428

ID AAF49428 standard; DNA; 15 BP.

AC AAF49428;

AT 30-MAR-2001 (first entry)

DE IGF-I oligonucleotide #388.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

XX Homo sapiens.

OS WO200078341-A1.

PN 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

XX Wright CJ, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

XX Example 8; Page 63; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation,

inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-P45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 2 A; 6 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 13.7%; Score 10; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

899 CCTGGTCAT 908  
 |||||  
 5 CCTGGTCAT 14

RESULT 874  
 F48462/C

AAF48462 standard; DNA; 15 BP.

AAF48462;

30-MAR-2001 (first entry)

IGFBP3 oligonucleotide #1882.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiac; virucide; ophthalmological; keloid; skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 7; Page 56; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-P45161). The method is useful for ameliorating the effects of psoriasis,

ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 7 A; 2 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 919 CTTTGCCTTT 928  
 |||||  
 Db 10 CTTTGCCTTT 1

RESULT 875

ABK68681

ID ABK68681 standard; DNA; 15 BP.

XX ABK68681;

XX 02-JUL-2002 (first entry)

Human SCYA2 gene allele-specific oligonucleotide sequencing primer #1.

Human; small inducible cytokine A2; SCYA2; primer; ss; haplotype pair;

haplotyping; atherosclerosis; antiarteriosclerotic; gene therapy;

single nucleotide polymorphism; genotyping; drug screening; sequencing; chromosome 17q11.2-q21.1.

OS Homo sapiens.

XX WO200218413-A2.

PN 07-MAR-2002.

XX 28-AUG-2001; 2001WO-US026899.

XX 28-AUG-2000; 2000US-0228496P.

XX (GENA-) GENAISSANCE PHARM INC.

XX Anastasio AE, Finkel K, Koshy B, Kumar AM, Lee HH;

XX WPI; 2002-339655/37.

New genetic variants having polymorphisms in the small inducible cytokine A1 (SCYA2) gene, useful for studying the function of SCYA2, and for treating disorders affected by expression or function of the SCYA2 isogene.

Claim 17; Page 13; 58pp; English.

The invention relates to single nucleotide polymorphisms in the gene encoding human small inducible cytokine A2 (SCYA2) polypeptide. A method for haplotyping the SCYA2 gene in an individual comprises identifying the nucleotide at one or more polymorphic sites and determining whether one of the copies of the gene is defined by one of the SCYA2 haplotypes given in the specification or whether both copies are defined by a haplotype pair. This method is useful in genotyping, whereby all possible haplotype pairs can be assigned to specific genotypes. An association between a trait and a haplotype or haplotype pair of the SCYA2 gene can be identified by comparing the frequency of the haplotype or haplotype pair in a population exhibiting the trait with the frequency of the haplotype or haplotype pair in a reference population, where a higher haplotype frequency in the trait population indicates the trait is associated with the haplotype or haplotype pair. SCYA2 and its corresponding DNA are used for studying the expression and function of SCYA2, and in screening for candidate drugs to treat diseases related to SCYA2 activity, such as atherosclerosis. Sequences ABK68681-ABK68692 represent allele-specific



```

CC oligonucleotide sequencing primers used for detecting SCVA2 gene
CC polymorphisms
XX Sequence 15 BP; 2 A; 7 C; 2 G; 3 T; 0 U; 1 Other;
SQ Query Match 13.7%; Score 10; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CY 930 ATCCCTCTCTC 939
| | | | | | | |
| | | | | | | |
Db 3 ATCCCTCTCTC 12

RESULT 876
ABN87905/c
ID ABN87905 standard; DNA; 15 BP.
XX
AC ABN87905;
XX
DT 12-AUG-2002 (first entry)
XX
DE Human GSR allele specific oligonucleotide probe SEQ ID NO:24.
XX
KW Human; glutathione reductase; GSR; enzyme; haemolytic anaemia; SNP;
KW gene therapy; antianaemic; polymorphic; single nucleotide polymorphism;
KW probe; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT misc_feature 8 /*tag= a
TT /note= "polymorphic base"
XX
FN WO200242320-A2.
XX
PD 30-MAY-2002.
XX
PF 13-NOV-2001; 2001WO-US046473.
XX
PR 10-NOV-2000; 2000US-0247202P.
XX
PA (GENA-) GENAISSANCE PHARM INC.
XX
PI Bieglecki KM, Sanchis A, Sausker EA, Sun X;
XX
DR WPI; 2002-471719/50.
XX
PT New genetic variants of Glutathione reductase isogenes, useful for
PT improving efficiency and reliability in drug development for treating
PT hemolytic anemia.
XX
PS Claim 14; Page 14; 137pp; English.
XX
CC The present invention describes genetic variants of the human glutathione
CC reductase (GSR) gene (1). (1) has antianaemic activity and can be used in
CC gene therapy. (1) can be used in screening for drugs targeting (1) that
CC are useful for treating haemolytic anaemia. Methods from the present
CC invention can be used for improving the efficiency and reliability of
CC several steps in the discovery and development of drugs for treating
CC diseases associated with GSR activity; for haplotyping, which is also
CC used by the pharmaceutical research scientist to validate GSR as a
CC candidate target for treating a specific condition or disease predicted
CC to be associated with GSR activity, e.g. haemolytic anaemia, and in the
CC design of clinical trials for treating a specific condition of disease
CC associated with GSR activity; and for screening compounds targeting GSR.
CC (1) is useful in studying the expression and function of GSR, and in
CC expressing GSR protein for use in screening for candidate drugs to treat
CC diseases related to GSR activity. (1) is also useful in studying the
CC effect of the variation on the biological activity of GSR as well as on
CC the binding affinity of candidate drugs targeting GSR for the treatment
CC of haemolytic anaemia. The present sequence represents an allele specific

```

---

```

CC oligonucleotide (ASO) probe for the human GSR gene, which is given in the
CC exemplification of the present invention. N.B. The polymorphic base
CC (showing a single nucleotide polymorphism) in the ASO probe is shown
CC using an IUPAC ambiguity code (as given in the present invention)
XX
SQ Sequence 15 BP; 7 A; 4 C; 1 G; 2 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 15;
Best Local Similarity 83.3%; Pred. No. 1.1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

CY 941 TCATTGGTTTAA 952
| | | | | | | |
| | | | | | | |
Db 12 TCATYGGTTTGA 1

RESULT 877
ABK81303/c
ID ABK81303 standard; DNA; 15 BP.
XX
AC ABK81303;
XX
DT 13-AUG-2002 (first entry)
XX
DE Human ADMR gene allele-specific oligonucleotide sequencing primer #22.
XX
KW Human; G protein-coupled receptor similar to the adrenomedullin receptor;
KW ADMR; haplotyping; haplotype pair; congestive heart failure; primer; ss;
KW arterial hypertension; pulmonary hypertension; renal failure; sepsis;
KW chromosome 12; single nucleotide polymorphism; sequencing.
XX
OS Homo sapiens.
XX
FN WO200226770-A2.
XX
PD 04-APR-2002.
XX
PF 01-OCT-2001; 2001WO-US030879.
XX
PR 29-SEP-2000; 2000US-0236570P.
XX
PA (GENA-) GENAISSANCE PHARM INC.
XX
PI Choi JY, Lee HH, Shah N;
XX
DR WPI; 2002-435192/46.
XX
PT Novel G-protein coupled receptor similar to the adrenomedullin receptor
PT gene, useful therapeutically and in screening for drugs targeting
PT receptor polypeptide.
XX
PS Claim 14; Page 14; 78pp; English.
XX
CC The invention relates to single nucleotide polymorphisms in the gene
CC encoding the human G protein-coupled receptor similar to the
CC adrenomedullin receptor (ADMR) polypeptide. A method for haplotyping the
CC ADMR gene in an individual comprises identifying the nucleotide at one or
CC more polymorphic sites and determining whether one of the copies of the
CC gene is defined by one of the ADMR haplotypes given in the specification
CC or whether both copies are defined by a haplotype pair. This method is
CC useful in genotyping, whereby all possible haplotype pairs can be
CC assigned to specific genotypes. An association between a trait and a
CC haplotype or haplotype pair of the ADMR gene can be identified by
CC comparing the frequency of the haplotype or haplotype pair in a
CC population exhibiting the trait with the frequency of the haplotype or
CC haplotype pair in a reference population, where a higher haplotype or
CC frequency in the trait population indicates the trait is associated with
CC the haplotype or haplotype pair. ADMR and its corresponding DNA are used
CC for studying the expression and function of ADMR, for use in screening
CC for candidate drugs to treat diseases related to ADMR activity, such as
CC congestive heart failure, arterial hypertension, pulmonary hypertension,
CC renal failure, and sepsis. Sequences ABK81282-ABK81303 represent allele-
CC specific oligonucleotide sequencing primers used to detect ADMR gene

```

## polymorphisms

Sequence 15 BP; 4 A; 2 C; 7 G; 1 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 15;

Best Local Similarity 100.0%; Pred. No. 1.1e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

933 CCTCCTCTTC 942

|||||

10 CCTCCTCTTC 1

RESULT 878

AS16187/C

AAS16187 standard; DNA; 15 BP.

AAS16187;

14-FEB-2002 (first entry)

Human apolipoprotein C1 (APOC1) gene oligonucleotide probe #5.

Human; apolipoprotein C1; APOC1; single nucleotide polymorphism; probe; haplotyping; haplotype pair; hypercholesterolaemia; neuroprotective; antilipaeamic. senile dementia of Alzheimer's type; neuroprotective; antilipaeamic.

Homo sapiens.

WO200177129-A2.

18-OCT-2001.

10-APR-2001; 2001WO-US011808.

11-APR-2000; 2000US-0196545P.

(GENA-) GENAISSANCE PHARM INC.

Bentivegna SC, Chew A, Choi JY, Koshiy B, Stephens JC;

WPI; 2002-041286/05.

New haplotypes of the human apolipoprotein C1 gene, useful to detect and find treatment for disease associated with its activity such as hypercholesterolemia and Alzheimer's disease.

Claim 16, Page 13; 51pp; English.

The invention relates to single nucleotide polymorphisms in the human apolipoprotein C1 (APOC1) gene. Haplotyping the APOC1 gene of an individual, comprises determining if the individual has one of the APOC1 haplotypes or haplotype pairs fully defined in the specification. Genotyping the APOC1 gene of an individual, comprises determining the identity of the nucleotide pair at one or more polymorphic sites and predicting a haplotype pair for the APOC1 gene of an individual by enumerating all possible haplotype pairs which are consistent with the genotype, comparing the possible haplotype pairs to the data detailed in the specification and assigning a haplotype pair to the individual that is consistent with the data. Identifying an association between a trait and a haplotype or haplotype pair of the APOC1 gene, comprises comparing the frequency of the haplotype/haplotype pair in a population exhibiting the trait with that of a reference population, where the haplotype/haplotype pair is one described in the specification and a higher frequency in the trait population indicates the trait is associated with the haplotype. The sequences and methods of the invention are used to diagnose and develop treatment for disease associated with APOC1 activity, such as hypercholesterolaemia and senile dementia of Alzheimer's type (SDAT). This sequence represents an oligonucleotide probe used for detecting human APOC1 DNA polymorphisms

Sequence 15 BP; 7 A; 5 C; 0 G; 2 T; 0 U; 1 Other;

Query Match

13.7%; Score 10; DB 1; Length 15;

Best Local Similarity 83.3%; Pred. No. 1.1e+03;

Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTCCTTTGGT 918

|||||

Db 13 ATTTCCTTTGGT 2

RESULT 879

ABV93654/C

ID ABV93654 standard; DNA; 15 BP.

XX AC ABV93654;

XX XX

DT 08-JAN-2003 (first entry)

XX DE Bacillus thuringiensis toxin Cry related oligonucleotide Cry1Ga.

XX KW Bacillus thuringiensis; insecticide; toxin; Cry; pepsin cleavage site;

XX KW Pepsin; PCS; ss.

XX OS Bacillus thuringiensis.

XX OS Synthetic.

XX PN FR2822157-A1.

XX PD 20-SEP-2002.

XX PF 19-MAR-2001; 2001FR-00003691.

XX PR 19-MAR-2001; 2001FR-00003691.

XX PA (AVET) AVENTIS CROPS SCIENCE SA.

XX PI Freyssinet G, Rang C, Frutos R;

XX DR WPI; 2003-002439/01.

PT New modified Cry protein, useful as insecticide, comprises at least one additional pepsin cleavage site to reduce persistence in mammalian gut.

PS Example 4; Page 37; 134pp; French.

XX The present invention describes a modified Cry protein (I) that is sensitive to pepsin and comprises at least one additional pepsin cleavage site (PCS). Also described: (a) increasing pepsin sensitivity of Cry proteins by incorporating at least one extra PCS; (b) polynucleotides (II) that encode (i); (c) chimeric genes (CG) that contain a promoter, (II) and terminator; (d) expression or transformation vector (III) that contains CG; (e) host organism (IV) transformed with (III), also, where the organism is a plant, its parts and seeds; (f) production of (I) by growing (IV); and (g) mono- or polyclonal antibodies (Ab) directed against (I). (I) has insecticide activity. (I) can be used as insecticides, particularly where expressed in transgenic plants. (I) are sensitive to enzymes in the digestive tract of mammals, so do not persist in the tract (lack of persistence is required by regulatory authorities for use, in foods, of seeds containing Cry proteins). Extra PCS do not increase degradation in the digestive tract of insects, so have no effect on insecticidal activity. ABV93450 to ABV93909 and ABP67997 to ABP68308 represent sequences used in the exemplification of the present invention

XX Sequence 15 BP; 5 A; 0 C; 6 G; 4 T; 0 U; 0 Other;

Query Match

13.7%; Score 10; DB 1; Length 15;

Best Local Similarity 100.0%; Pred. No. 1.1e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 928 TTATCCCTCC 937

|||||

Db 13 TTATCCCTCC 4

```
RESULT 880
AAQ25497/c
ID AAQ25497 standard; DNA; 13 BP.
XX
XX
AC AAQ25497;
XX
XX
DT 25-MAR-2003 (revised)
DT 07-DEC-1992 (first entry)
XX
XX
DE Purine rich HUMILIRA target duplex sequence.
XX
XX
KW Target; human interleukin-1 receptor gene; AIDS; triplex; HIV; hepatitis;
KW malignancy; inflammation; ds.
XX
XX
OS Synthetic.
XX
XX
FN WO9209705-A1.
XX
XX
PD 11-JUN-1992.
XX
XX
PF 25-NOV-1991; 91WO-US008811.
XX
XX
PR 23-NOV-1990; 90US-00617907.
PR 18-JAN-1991; 91US-00643382.
PR 08-APR-1991; 91US-00683420.
PR 17-APR-1991; 91US-00686544.
PR 17-APR-1991; 91US-00686546.
PR 17-APR-1991; 91US-00686547.
PR 27-SEP-1991; 91US-00766733.
XX
XX
PA (GILE-) GILEAD SCI INC.
XX
XX
PI Froehner B, Krawczyk S, Matteucci MD, Milligan J;
XX
XX
DR WPI; 1992-217083/26.
XX
XX
PT New oligomers contg. modified bases - which form a triplex with G-C
PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
PT herpes malignancy and inflammation.
XX
XX
PS Claim 11; Page 64; 77pp; English.
XX
XX
CC The sequence depicts a HUMILIRA (interleukin-1 receptor) sequence
CC beginning at nucleotide 2701. The sequence is a viral duplex sequence
CC contg. a purine-rich region concentrated on one chain of the duplex. The
CC sequence may be prep'd. by standard DNA synthesis. The HUMILIRA duplex
CC sequence is used as a target for novel oligomers which are capable of
CC forming a triplex at physiological pH by coupling into the major groove
CC of the DNA duplex. Such an oligomers is ILIR 901 which is capable of
CC forming a triplex with this sequence. The oligo- mers are used in the
CC treatment of inflammation. Similar oligomers may be used to target viral
CC DNA duplexes specific for HIV, herpes and other viruses. The triplex
CC helices form under mild conditions thus assays may be carried out without
CC subjecting the test specimen to harsh conditions. The oligomer is able to
CC inhibit gene expression, as verified by in vitro systems. See also
CC AAQ25452-25501 and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN
CC field.)
XX
XX
SQ Sequence 13 BP; 6 A; 0 C; 7 G; 0 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
CY 926 TTTTATCCCTCCT 938
DB 13 TTCTCTCCCTCCT 1
RESULT 881
AAQ88665/c
ID AAQ88665 standard; DNA; 13 BP.
XX
```

```
AC AAQ88665;
XX
XX
DT 03-JAN-1996 (first entry)
XX
XX
DE Human mitochondrial D-loop region DNA probe 9-15.
XX
XX
KW Tiling strategy; immobilised nucleic acid probe array; mitochondrial DNA;
KW D-loop region; biological chip; hybridisation fingerprint;
KW interrogation position; ss.
XX
XX
OS Synthetic.
XX
XX
FH Key Location/Qualifiers
FT modified_base 13
FT /*tag= a
FT /note= "3'-end of probe is covalently attached to chip
FT surface"
XX
XX
FN WO9511995-A1.
XX
XX
PD 04-MAY-1995.
XX
XX
PF 26-OCT-1994; 94WO-US012305.
XX
XX
PR 26-OCT-1993; 93US-00143312.
PR 02-AUG-1994; 94US-00284064.
XX
XX
PA (AFFY-) AFFYMAX TECHNOLOGIES NV.
XX
XX
PI Chee M, Cronin MT, Fodor SP, Gingeras TR, Huang XC, Hubbell EA;
PI Lipshutz RJ, Lobban PE, Miyada CG, Morris MS, Shah N, Sheldon EL;
XX
XX
DR WPI; 1995-178887/23.
XX
XX
PT New arrays of oligo:nucleotide probes - used for comparing known
PT sequences with variants for detection of mutation(s) and sequencing.
XX
XX
PS Disclosure; Page 108; 223pp; English.
XX
XX
CC A DNA chip was prepared for analysing sequences contained in a 1.3kb
CC fragment of human mitochondrial DNA from the D-loop region, the most
CC polymorphic region of human mitochondrial DNA. The chip comprised a set
CC of 268 overlapping oligonucleotide probes (see AAQ88421-Q88684) of
CC varying length (9-14 nucleotides) with varying overlaps arranged in a 1cm
CC x 1cm array. Each position in the sequence was represented by at least
CC one probe (usually 2 or more). DNA was amplified from six human donors
CC and then transcribed to give the 1.3kb RNA transcripts which were
CC fragmented and hybridised to the chip. For each individual, a unique
CC hybridisation fingerprint was produced on the chip; all differences could
CC be correlated with differences in the cloned genomic DNA sequence
XX
XX
SQ Sequence 13 BP; 9 A; 1 C; 3 G; 0 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
CY 910 TTCTTTGGTCTTT 922
DB 13 TTCTCTGTCTTT 1
RESULT 882
AAAX14669
ID AAAX14669 standard; DNA; 13 BP.
XX
XX
AC AAAX14669;
XX
XX
DT 24-MAR-1999 (first entry)
XX
XX
DE Triple helix third strand of HER-2 gene nucleotides 2955-2967.
XX
XX
KW Triplex formation; DNA detection; triple helix; identification; bacteria;
```

```

oncogene; virus; ss.
Synthetic.
Homo sapiens.
US5861244-A.
19-JAN-1999.
22-DEC-1993; 93US-00173489.
29-OCT-1992; 92US-00968436.
(PROF-) PROFILE DIAGNOSTIC SCI INC.
Hepburn AG, Wang C;
WPI; 1999-130384/11.
Assay of genetic sequences based on triplex formation from double
stranded analyte - and hybrid of anchor and reporter sequences, with
reporter released if triplex formation occurs, used e.g. to identify
bacteria.
Disclosure; Col 15-16; 168pp; English.
The present sequence represents a polynucleotide that is able to form a
triple helix with a double stranded sequence. Cytosine bases in the
present can be replaced with 5-methylcytosine for increased triplex
stability. The present sequence is used in the assay of the invention,
where it can be part of the anchor DNA or reporter DNA sequence. The
assay comprises adding a sample containing double-stranded DNA test
sequences to an aqueous medium containing at least one complex of anchor
DNA, attached to a solid support, and reporter DNA, where either a part
of the anchor DNA or reporter DNA is designed to form a triplex-strand
structure with part of the test sequence. Triplex formation results in
displacement of the reporter DNA which is detected as an indication of
the presence of the DNA test sequence. The method is used to detect DNA
sequences, particularly for identification of bacteria (by detecting
genes for ribosomal RNA) in clinical samples, but also detection of
oncogenes and Hepatitis B virus
Sequence 13 BP; 0 A; 8 C; 0 G; 5 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
/ 924 CCTTTATCCCTC 936
| | | | |
| 1 CCTTTCCCTC 13
35ULT 883
AA06019
AAA06019 standard; DNA; 13 BP.
AAA06019;
14-JUN-2000 (first entry)
CFTR gene analysis oligonucleotide probe SEQ ID NO:29.
CFTR; cystic fibrosis transmembrane conductance regulator; detection;
mutation; probe; human; hybridisation; ss.
Homo sapiens.
US6027880-A.
22-FEB-2000.
10-OCT-1995; 95US-00544381.
XX
PR 26-OCT-1993; 93US-00143312.
PR 02-AUG-1994; 94US-00284064.
PR 26-OCT-1994; 94WO-US012305.
PR 02-AUG-1995; 95US-00510521.
XX
PA (AFFY-) AFFYMETRIX INC.
XX
XX Huang XC, Chee M, Lobban PE, Hubbell EA, Sheldon EL, Miyada CG;
PI Cronin MT, Lipschutz RJ, Morris MS, Fodor SPA;
XX
XX WPI; 2000-194825/17.
XX
PT An array of nucleic acid probes immobilized on a solid support, useful
PT for identifying mutations in the cystic fibrosis transmembrane
PT conductance regulator.
XX
PS Disclosure; Col 75; 114pp; English.
XX
XX The present invention describes an array of nucleic acid probes
CC immobilised on a solid support, which comprises: (1) a first probe set,
CC comprising probes with a segment of at least 6 nucleotides complementary
CC to the CFTR (cystic fibrosis transmembrane conductance regulator) gene,
CC where the segment includes at least 1 interrogation position
CC complementary to a nucleotide in the CFTR gene sequence; and (2) second,
CC third and fourth probe sets, each comprising probes identical to those in
CC (1) except that the interrogation position is occupied by a different
CC nucleotide. AAA05991 to AAA06240 represent CFTR gene analysis
CC oligonucleotide probes for use in the exemplification of the present
CC invention. The present invention also describes a method of comparing a
CC target nucleic acid with a reference sequence consisting of a
CC predetermined sequence of nucleotides, comprising: (a) hybridising a
CC sample comprising the target nucleic acid to an array of nucleic acid
CC probes immobilised on a solid support; (b) comparing the relative
CC specific binding of two corresponding probes from the first and second
CC probe sets; (c) assigning a nucleotide in the target sequence as the
CC complement of the interrogation position of the probe having the greater
CC specific binding; and (d) repeating (b) and (c) by comparing the relative
CC specific binding of a further two corresponding probes from the first and
CC second probe sets until each nucleotide of interest in the target
CC sequence has been assigned. The array is useful for analysis of the CFTR
CC gene, e.g. detection of mutations
XX
SQ Sequence 13 BP; 0 A; 3 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 915 TGGTCTTTGCCCT 927
| | | | |
| 1 TGGTGTTCCT 13
Db
RESULT 884
ABC93203
ID ABC93203 standard; DNA; 13 BP.
XX
AC ABC93203;
XX
XX 21-FEB-2002 (first entry)
DE
DE Oligonucleotide SEQ ID NO 93220 for detecting SNP TSC0023294.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.

```

XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX Claim 1; SEQ ID NO 93220; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 1 A; 7 C; 1 G; 4 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 928 TTATCCCTCCTCT 940  
Db 1 TTATCCGCCCT 13  
RESULT 885  
ABC93919/c  
ID ABC93919 standard; DNA; 13 BP.  
XX ABC93919;  
XX 21-FEB-2002 (first entry)  
XX Oligonucleotide SEQ ID NO 93936 for detecting SNP TSC0023471.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine

PT methylation status.  
XX Claim 1; SEQ ID NO 93936; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 6 A; 2 C; 0 G; 5 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 941 TCATTGGTTTAAAT 953  
Db 13 TAATAGGTTTAAAT 1  
RESULT 886  
ABC19417/c  
ID ABC19417 standard; DNA; 13 BP.  
XX ABC19417;  
XX 20-FEB-2002 (first entry)  
XX Oligonucleotide SEQ ID NO 19434 for detecting SNP TSC0004044.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX Claim 1; SEQ ID NO 19434; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX

data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13; Best Local Similarity 84.6%; Pred. No. 1.1e+03; Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

940 TTCATTGGTTTAA 952  
||| |||||  
13 TTAGTTGGTTTAA 1

RESULT 887

ABC20570  
ABC20570 standard; DNA; 13 BP.

ABC20570;

20-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 20587 for detecting SNP TSC0004194.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 20587; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 2 A; 0 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13; Best Local Similarity 84.6%; Pred. No. 1.1e+03; Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

940 TTCATTGGTTTAA 952  
||| |||||  
1 TTGATTGGTTTAA 13

RESULT 888

ABC99316/C  
ABC99316 standard; DNA; 13 BP.

ABC99316;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 99333 for detecting SNP TSC0024681.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 99333; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 4 A; 0 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13; Best Local Similarity 84.6%; Pred. No. 1.1e+03; Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

924 CCTTTTATCCCC 936  
||| |||||  
13 CCTTCTATCCCC 1

RESULT 889

ABF00947  
ABF00947 standard; DNA; 13 BP.

ABF00947;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 100944 for detecting SNP TSC0025123.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 OS Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 100944; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 XX Sequence 13 BP; 0 A; 8 C; 1 G; 4 T; 0 U; 0 Other;  
 SQ Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 932 CCTCTCCCTTCAT 944  
 DB ||||| |||||  
 1 CCTCTCCGTCCTC 13  
 RESULT 890  
 ABC27659/C  
 ID ABC27659 standard; DNA; 13 BP.  
 AC ABC27659;  
 XX 20-FEB-2002 (first entry)  
 DE Oligonucleotide SEQ ID NO 27676 for detecting SNP TSC0007753.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 OS Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.

PA (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 27676; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 XX Sequence 13 BP; 10 A; 2 C; 0 G; 1 T; 0 U; 0 Other;  
 SQ Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 938 TCCTCATTGGTTT 950  
 DB ||||| |||||  
 13 TTTTATTGGTTT 1  
 RESULT 891  
 ABC32798/C  
 ID ABC32798 standard; DNA; 13 BP.  
 XX ABC32798;  
 XX 20-FEB-2002 (first entry)  
 DE Oligonucleotide SEQ ID NO 32815 for detecting SNP TSC0010303.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 OS Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 32815; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 6 A; 0 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

933 CCTCCTCTTCATT 945

13 CCTCCTCTTCATT 1

RESULT 892

ABC33273/C  
ABC33273 standard; DNA; 13 BP.

ABC33273;

20-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 33290 for detecting SNP TSC0010604.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 33290; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGGTTTAA 952

Db 13 TTGATTGATTAA 1

RESULT 893

ABC14808  
ID ABC14808 standard; DNA; 13 BP.

XX

AC ABC14808;

DT 20-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 14815 for detecting SNP TSC0003331.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

PN WO200177384-A2.

PD 18-OCT-2001.

PF 06-APR-2001; 2001WO-IB000713.

PR 07-APR-2000; 2000DE-01019173.

PA (EPIG-) EPIGENOMICS AG.

PI Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 14815; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 3 A; 0 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGGTTTAAAT 953

Db 1 TTATTGTTTAAAT 13

RESULT 894

ABC66118  
ID ABC66118 standard; DNA; 13 BP.



```

XX ABC66118;
AC
XX 21-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 66135 for detecting SNP TSC0017384.
DE
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
PN
XX 18-OCT-2001.
DT
XX
XX 06-APR-2001; 2001WO-IB000713.
DE
XX 07-APR-2000; 2000DE-01019173.
DE
XX (EPIG-) EPIGENOMICS AG.
PA
XX Olek A, Piepenbrock C, Berlin K;
PI
XX WPI; 2001-657177/75.
PI
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
PT
XX
XX Claim 1; SEQ ID NO 66135; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 1 A; 0 C; 5 G; 7 T; 0 U; 0 Other;
SQ
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGGTTTAAGTA 956
DB 1 TTGGTTTGGTGA 13
||||| |||||

RESULT 895
ABF44004
ID ABF44004 standard; DNA; 13 BP.
AC
XX ABF44004;
XX
XX 21-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 144001 for detecting SNP TSC0036164.
DE
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
PN
XX 18-OCT-2001.
DT
XX
XX 06-APR-2001; 2001WO-IB000713.
DE
XX 07-APR-2000; 2000DE-01019173.
DE
XX (EPIG-) EPIGENOMICS AG.
PA
XX Olek A, Piepenbrock C, Berlin K;
PI
XX WPI; 2001-657177/75.
PI
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
PT
XX
XX Claim 1; SEQ ID NO 144001; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 1 A; 0 C; 5 G; 7 T; 0 U; 0 Other;
SQ
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGGTTTAAGTA 956
DB 1 TTGGTTTGGTGA 13
||||| |||||

RESULT 896
ABF97337
ID ABF97337 standard; DNA; 13 BP.
AC
XX ABF97337;
XX
XX 22-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 197334 for detecting SNP TSC0048564.
DE
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
PN
XX 18-OCT-2001.
DT
XX
XX 06-APR-2001; 2001WO-IB000713.
DE
XX 07-APR-2000; 2000DE-01019173.
DE
XX (EPIG-) EPIGENOMICS AG.
PA
XX Olek A, Piepenbrock C, Berlin K;
PI
XX WPI; 2001-657177/75.
PI
XX

```

```

PN WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
PT
XX
XX Claim 1; SEQ ID NO 144001; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 0 A; 0 C; 3 G; 10 T; 0 U; 0 Other;
SQ
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 908 TTTTCTTTGGTCT 920
DB 1 TTTTCTTTGGTGT 13
||||| |||||

RESULT 896
ABF97337
ID ABF97337 standard; DNA; 13 BP.
AC
XX ABF97337;
XX
XX 22-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 197334 for detecting SNP TSC0048564.
DE
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
PN
XX 18-OCT-2001.
DT
XX
XX 06-APR-2001; 2001WO-IB000713.
DE
XX 07-APR-2000; 2000DE-01019173.
DE
XX (EPIG-) EPIGENOMICS AG.
PA
XX Olek A, Piepenbrock C, Berlin K;
PI
XX WPI; 2001-657177/75.
PI
XX

```

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 197334; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 2 A; 7 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

925 CTTTATCCCTCC 937

|||||

1 CCTATATCCCTCC 13

SULT 897

H23622

ABH23622 standard; DNA; 13 BP.

ABH23622;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 223599 for detecting SNP TSC0054425.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 223599; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences

SQ Sequence 13 BP; 0 A; 0 C; 3 G; 10 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 910 TTTTGTGCTCTT 922

|||||

1 TTTTGTGCTCTT 13

RESULT 898

ABF49805/c

ID ABF49805 standard; DNA; 13 BP.

XX AC ABF49805;

XX DT 21-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 149802 for detecting SNP TSC0037798.

XX SN; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX XX WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX XX WPI; 2001-657177/75.

XX DR Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX PT designed to detect single-nucleotide polymorphisms and cytosine  
XX PT methylation status.

XX PS Claim 1; SEQ ID NO 149802; 29pp + Sequence Listing; German.

XX CC This invention describes novel oligonucleotide primers or peptide nucleic  
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The  
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX CC range of diseases including immune system, gastrointestinal, respiratory,  
XX CC central nervous system, cardiovascular and metabolic disorders. The  
XX CC oligomers are also used for detecting cell type differentiation. ABC00010  
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
XX CC represent the oligomers described in the invention. NOTE: The sequence  
XX CC data for this patent did not form part of the printed specification, but  
XX CC was obtained in electronic format from WIPO at  
XX CC ftp.wipo.int/pub/published\_pct\_sequences

SQ Sequence 13 BP; 9 A; 4 C; 0 G; 0 T; 0 U; 0 Other;

Query Match

13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 911 TCTTGGTCTTGG 923  
 |||||  
 13 TTTTGGTCTTGG 1

RESULT 899  
 ABH25679/c  
 ID ABH25679 standard; DNA; 13 BP.  
 AC ABH25679;  
 XX  
 XX  
 XX 22-FEB-2002 (first entry)  
 XX  
 XX  
 XX  
 DE Oligonucleotide SEQ ID NO 225656 for detecting SNP TSC0055005.  
 XX  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO200177384-A2.  
 PN  
 XX 18-OCT-2001.  
 PD  
 XX  
 XX 06-APR-2001; 2001WO-IB000713.  
 PF  
 XX  
 XX 07-APR-2000; 2000DE-01019173.  
 PR  
 XX (EPIG-) EPIGENOMICS AG.  
 XX  
 XX Olek A, Piepenbrock C, Berlin K;  
 PI  
 XX WPI; 2001-657177/75.  
 DR  
 XX  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 PT  
 XX Claim 1; SEQ ID NO 225656; 29pp + Sequence Listing; German.  
 PS  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 CC  
 XX Sequence 13 BP; 8 A; 1 C; 0 G; 4 T; 0 U; 0 Other;  
 XX  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 CC  
 XX Sequence 13 BP; 8 A; 1 C; 0 G; 4 T; 0 U; 0 Other;  
 XX  
 XX Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 XX

QY 944 TTGGTTTAATGTA 956  
 |||||  
 13 TTTGTTTAATATA 1

RESULT 900  
 ABF56004/c  
 ID ABF56004 standard; DNA; 13 BP.  
 AC ABF56004;  
 XX  
 XX  
 XX 21-FEB-2002 (first entry)  
 DT  
 XX

DE Oligonucleotide SEQ ID NO 156001 for detecting SNP TSC0039366.  
 XX  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO200177384-A2.  
 PN  
 XX 18-OCT-2001.  
 PD  
 XX  
 XX 06-APR-2001; 2001WO-IB000713.  
 PF  
 XX  
 XX 07-APR-2000; 2000DE-01019173.  
 PR  
 XX (EPIG-) EPIGENOMICS AG.  
 XX  
 XX Olek A, Piepenbrock C, Berlin K;  
 PI  
 XX WPI; 2001-657177/75.  
 DR  
 XX  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 PT  
 XX Claim 1; SEQ ID NO 156001; 29pp + Sequence Listing; German.  
 PS  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 CC  
 XX Sequence 13 BP; 6 A; 1 C; 4 G; 2 T; 0 U; 0 Other;  
 XX  
 XX Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 XX

QY 949 TTAATGCTATCGCT 961  
 |||||  
 13 TTAATGCTATCGCT 1

Db

RESULT 901  
 ABH32575  
 ID ABH32575 standard; DNA; 13 BP.  
 XX  
 XX ABH32575;  
 AC  
 XX 22-FEB-2002 (first entry)  
 DT  
 XX  
 XX Oligonucleotide SEQ ID NO 232552 for detecting SNP TSC0056713.  
 DE  
 XX  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO200177384-A2.  
 PN  
 XX 18-OCT-2001.  
 PD  
 XX  
 XX 06-APR-2001; 2001WO-IB000713.  
 PF

07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
Claim 1; SEQ ID NO 232552; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
Sequence 13 BP; 1 A; 7 C; 0 G; 5 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
924 CCTTTATCCCTC 936  
||| ||| ||| |||  
1 CCATTTCCTC 13  
SULT 902  
F61760  
ABF61760 standard; DNA; 13 BP.  
ABF61760;  
22-FEB-2002 (first entry)  
Oligonucleotide SEQ ID NO 161757 for detecting SNP TSC0040719.  
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.  
Homo sapiens.  
WO200177384-A2.  
18-OCT-2001.  
06-APR-2001; 2001WO-IB000713.  
07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

PS Claim 1; SEQ ID NO 161757; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 947 GTTTAATGTCG 959  
||||| ||| |||  
Db 1 GTTTATTGTATAG 13  
RESULT 903  
ABH12091/C  
ID ABH12091 standard; DNA; 13 BP.  
XX  
AC ABH12091;  
XX  
DT 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 212068 for detecting SNP TSC0051693.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
FN WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
PT  
XX  
PS Claim 1; SEQ ID NO 212068; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

```
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 904 GTCATTTTCTTGTG 916
DB |||||
13 GTGATTTTATTG 1

RESULT 904
ABH14404/c
ID ABH14404 standard; DNA; 13 BP.
AC
XX ABH14404;
XX
XX 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 214381 for detecting SNP TSC0052150.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 214381; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 1 C; 5 G; 1 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 901 CTGCTCATTTTCT 913
DB |||||
13 CTGCCCATTTTCT 1

RESULT 905
ABH45585
ID ABH45585 standard; DNA; 13 BP.
AC
XX ABH45585;
XX
XX 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 245562 for detecting SNP TSC0059959.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 245562; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 5 C; 0 G; 5 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 933 CCTCCTCTTCATT 945
DB |||||
1 CCTACTCTACATT 13

RESULT 906
ABH49970/c
ID ABH49970 standard; DNA; 13 BP.
AC
XX ABH49970;
XX
XX 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 249947 for detecting SNP TSC0061046.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
```

```

Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB0000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 249947; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 5 A; 0 C; 7 G; 1 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
932 CCTCTCTCTCAT 944
13 CCTCATCTTCT 1
SUIT 907
H56041/c
ABH56041 standard; DNA; 13 BP.
ABH56041;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 256018 for detecting SNP TSC0062378.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB0000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 256018; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
943 ATTGCTTTAATGT 955
13 ATTGCTATATGTT 1
RESULT 908
ABH56628
ID ABH56628 standard; DNA; 13 BP.
AC ABH56628;
XX 22-FEB-2002 (first entry)
DE Oligonucleotide SEQ ID NO 256605 for detecting SNP TSC0009817.
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
OS Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB0000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 256605; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligonucleotides are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

```

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTCGTTTAA 952

Db 1 TTAATTCGTTTAA 13

RESULT 909

ABH66304/c

ID ABH66304 standard; DNA; 13 BP.

XX AC ABH66304;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 266281 for detecting SNP TSC0000410.

XX SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 XX designed to detect single-nucleotide polymorphisms and cytosine  
 XX methylation status.

XX Claim 1; SEQ ID NO 266281; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
 XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 XX and cytosine methylation status in chemically pretreated genomic DNA. The  
 XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 XX range of diseases including immune system, gastrointestinal, respiratory,  
 XX central nervous system, cardiovascular and metabolic disorders. The  
 XX oligomers are also used for detecting cell type differentiation. ABC00010  
 XX -ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 XX represent the oligomers described in the invention. NOTE: The sequence  
 XX data for this patent did not form part of the printed specification, but  
 XX was obtained in electronic format from WIPO at  
 XX ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 7 A; 0 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 931 TCCTCTCTCTCA 943

Db 13 TTCCTCTCTCTCA 1

RESULT 910

ABC99317

ID ABC99317 standard; DNA; 13 BP.

XX AC ABC99317;

XX 21-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 99334 for detecting SNP TSC0024681.

XX SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 XX designed to detect single-nucleotide polymorphisms and cytosine  
 XX methylation status.

XX Claim 1; SEQ ID NO 99334; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
 XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 XX and cytosine methylation status in chemically pretreated genomic DNA. The  
 XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 XX range of diseases including immune system, gastrointestinal, respiratory,  
 XX central nervous system, cardiovascular and metabolic disorders. The  
 XX oligomers are also used for detecting cell type differentiation. ABC00010  
 XX -ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 XX represent the oligomers described in the invention. NOTE: The sequence  
 XX data for this patent did not form part of the printed specification, but  
 XX was obtained in electronic format from WIPO at  
 XX ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 1 A; 8 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 924 CCTTTATCCCTC 936

Db 1 CCTTTATCCCTC 13

RESULT 911

ABC52723/c

ID ABC52723 standard; DNA; 13 BP.

XX AC ABC52723;

```

21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 52740 for detecting SNP TSC0014605.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB0000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 52740; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABCF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 10 A; 2 C; 0 G; 1 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
904 GTCAATTTCTTTG 916
13 GTTAATTTTTTG 1
SULT 912
C07406/c
ABC07406 standard; DNA; 13 BP.
ABC07406;
20-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 7397 for detecting SNP TSC0002151.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 7397; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABCF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 10 A; 2 C; 0 G; 1 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
904 GTCAATTTCTTTG 916
13 GTTAATTTTTTG 1
SULT 912
C07406/c
ABC07406 standard; DNA; 13 BP.
ABC07406;
20-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 7552 for detecting SNP TSC0002177.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB0000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 7397; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABCF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 4 A; 0 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
931 TCCCTCCTCTTCA 943
13 TCCCTCCTCTTCA 1
RESULT 913
ABC07561
ID ABC07561 standard; DNA; 13 BP.
AC ABC07561;
XX
XX
20-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 7552 for detecting SNP TSC0002177.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB0000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 7397; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABCF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 4 A; 0 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
931 TCCCTCCTCTTCA 943
13 TCCCTCCTCTTCA 1

```





```

1 TTATCCCTACTAT 13
RESULT 916
ABF12123/c
ABF12123 standard; DNA; 13 BP.
ABF12123;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 112120 for detecting SNP TSC0027988.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPITG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 112120; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI92073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
940 TTCAATGGTTAA 952
||| |||||
13 TTATTTGGTTAA 1
RESULT 917
BC39732/c
ABC39732 standard; DNA; 13 BP.
ABC39732;
20-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 39749 for detecting SNP TSC0012139.
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPITG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 39749; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI92073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 6 A; 0 C; 4 G; 3 T; 0 U; 0 Other;
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 921 TTGCTTTTATCC 933
DB 13 TTACCTTATATCC 1
RESULT 918
ABF40336
ID ABF40336 standard; DNA; 13 BP.
XX AC ABF40336;
XX 21-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 140333 for detecting SNP TSC0035176.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.

```

XX  
FA (EPIG-) EPIGENOMICS AG.  
XX  
FI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 140333; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGGTTTAATGTA 956  
DQ 1 TTGGTTTAATGTA 13

RESULT 919  
ABF93486/C  
ID ABF93486 standard; DNA; 13 BP.  
AC  
AC ABF93486;  
XX  
XX 22-FEB-2002 (first entry)  
XX  
XX Oligonucleotide SEQ ID NO 193483 for detecting SNP TSC0047598.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 193483; 29pp + Sequence Listing; German.  
XX

CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 6 A; 1 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 931 TCCCTCCTCTTCA 943  
DQ 13 TCTCTCCTCTTCA 1

RESULT 920  
ABF44207  
ID ABF44207 standard; DNA; 13 BP.  
AC  
AC ABF44207;  
XX  
XX 21-FEB-2002 (first entry)  
XX  
XX Oligonucleotide SEQ ID NO 144204 for detecting SNP TSC0036250.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 144204; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX

```
Sequence 13 BP; 3 A; 5 C; 0 G; 5 T; 0 U; 0 Other;
Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

933 CCTCCTCTTCATT 945
||| ||||| |||
1 CCACCTCTTAATT 13

RESULT 921
#F96258/c
ABF96258 standard; DNA; 13 BP.
ABF96258;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 196255 for detecting SNP TSC0048296.
SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 196255; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 7 A; 0 C; 6 G; 0 T; 0 U; 0 Other;
Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

926 TTTTATCCCTCCT 938
||| ||||| |||
13 TTTTATCCCTCCT 1

RESULT 922
#F97570
ABF97570 standard; DNA; 13 BP.
ABF97570;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 197567 for detecting SNP TSC0048621.
SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 197567; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 0 C; 1 G; 9 T; 0 U; 0 Other;
Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 945 TGCTTTAATGTTAT 957
||| ||||| |||
Db 1 TGTTTTAATTTAT 13

RESULT 923
ABF48956
ID ABF48956 standard; DNA; 13 BP.
AC ABF48956;
XX
XX
21-FEB-2002 (first entry)
XX
XX
Oligonucleotide SEQ ID NO 148953 for detecting SNP TSC0037589.
SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
OS
```

XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX Claim 1; SEQ ID NO 148953; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;  
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;  
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Oy 944 TTGGTTTAAATGTA 956  
Db 1 TTGGTTTAAATGTA 13  
RESULT 924  
ABF48957/C  
ID ABF48957 standard; DNA; 13 BP.  
XX ABF48957;  
XX 21-FEB-2002 (first entry)  
XX Oligonucleotide SEQ ID NO 148954 for detecting SNP TSC0037589.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX

DR WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX Claim 1; SEQ ID NO 148954; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;  
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;  
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Oy 944 TTGGTTTAAATGTA 956  
Db 13 TTGGTTTAAATGTA 1  
RESULT 925  
ABH28981  
ID ABH28981 standard; DNA; 13 BP.  
XX ABH28981;  
XX 22-FEB-2002 (first entry)  
XX Oligonucleotide SEQ ID NO 228958 for detecting SNP TSC0055846.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX Claim 1; SEQ ID NO 228958; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX

central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 0 A; 7 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

925 CTTTATCCCTCC 937

||||| ||||| ||||| ||||| |||||

1 CTTTATCCCTCC 13

RESULT 926

ABF79432/c

ABF79432 standard; DNA; 13 BP.

ABF79432;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 179429 for detecting SNP TSC0044419.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIC-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 179429; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 7 A; 0 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 924 CTTTATCCCTC 936

||||| ||||| ||||| ||||| |||||

13 CTTTATACATC 1

RESULT 927

ABH10321

ABH10321 standard; DNA; 13 BP.

XX ABH10321;

XX 22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 210298 for detecting SNP TSC0005129.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIC-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 210298; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 3 A; 3 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 937 CTTTATCGTT 949

||||| ||||| ||||| ||||| |||||

1 CTTTATTAATT 13

RESULT 928

ABF7621/c

ABF7621 standard; DNA; 13 BP.

XX ABF7621;

XX 22-FEB-2002 (first entry)



Claim 1; SEQ ID NO 264162; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ASI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 6 A; 4 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

940 TTCATTGGTTTAA 952

13 TTGATTGGTTAA 1

RESULT 931

ABC96141/C

ABC96141 standard; DNA; 13 BP.

ABC96141;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 96158 for detecting SNP TSC0023904.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 96158; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ASI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but

CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 6 A; 2 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGGTTTAA 953

Db 13 TAAATGGTTTAA 1

RESULT 932

ABC50444

ID ABC50444 standard; DNA; 13 BP.

XX AC

ABC50444;

DT 21-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 50461 for detecting SNP TSC0014180.

KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

PF 06-APR-2001; 2001WO-IB000713.

PR 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

PI Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX Claim 1; SEQ ID NO 50461; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ASI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 904 GTCATTTCCTTG 916

Db 1 GTATTATTATG 13



RESULT 933  
 ABF00946/C  
 ID ABF00946 standard; DNA; 13 BP.  
 XX AC  
 XX ABF00946;  
 XX  
 DT 21-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide SEQ ID NO 100943 for detecting SNP TSC0025123.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 FN WO200177384-A2.  
 XX  
 PD 18-OCT-2001.  
 XX  
 PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 PR 07-APR-2000; 2000DE-01019173.  
 XX  
 PA (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 DR WPI; 2001-657177/75.  
 XX  
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 PS Claim 1; SEQ ID NO 100943; 29pp + Sequence Listing; German.  
 CC  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: the sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 4 A; 1 C; 8 G; 0 T; 0 U; 0 Other;  
 CC  
 CC Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 CC Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 CC Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 932 CCTCCCTTCAT 944  
 DB 13 CCTCCGCTTCCT 1  
 RESULT 934  
 ABC07556/C  
 ID ABC07556 standard; DNA; 13 BP.  
 XX AC  
 XX ABC07556;  
 XX  
 DT 20-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide SEQ ID NO 7547 for detecting SNP TSC0002177.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 FN WO200177384-A2.  
 XX  
 PD 18-OCT-2001.  
 XX  
 PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 PR 07-APR-2000; 2000DE-01019173.  
 XX  
 PA (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 DR WPI; 2001-657177/75.  
 XX  
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 PS Claim 1; SEQ ID NO 7547; 29pp + Sequence Listing; German.  
 CC  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: the sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 3 A; 1 C; 5 G; 4 T; 0 U; 0 Other;  
 CC  
 CC Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 CC Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 CC Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 955 TATCGCTACCAAC 967  
 DB 13 TCTCGCTACCAAC 1  
 RESULT 935  
 ABF10013  
 ID ABF10013 standard; DNA; 13 BP.  
 XX AC  
 XX ABF10013;  
 XX  
 DT 21-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide SEQ ID NO 110010 for detecting SNP TSC0027487.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 FN WO200177384-A2.  
 XX  
 PD 18-OCT-2001.  
 XX  
 PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 PR 07-APR-2000; 2000DE-01019173.  
 XX  
 PA (EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 110010; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF9989, ABF0010-ABF9989, ABH0010-ABH9989 and AB10010-AB182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 1 A; 9 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

931 TCCCTCCCTCTTCA 943

1 TCCCCCTCTTCA 13

SULT 936

C66887/c

ABC66887 standard; DNA; 13 BP.

ABC66887;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 66904 for detecting SNP TSC0017534.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 66904; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABF9989, ABF0010-ABF9989, ABH0010-ABH9989 and AB10010-AB182073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QV 940 TTCATTGGTTTAA 952

13 TTTATTGGTTTAA 1

RESULT 937

ABF20729/c

ID ABF20729 standard; DNA; 13 BP.

XX AC ABF20729;

XX 21-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 120726 for detecting SNP TSC0030124.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 120726; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF9989, ABF0010-ABF9989, ABH0010-ABH9989 and AB10010-AB182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 6 A; 3 C; 0 G; 4 T; 0 U; 0 Other;

```

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGGTTTAA 952
Db 13 TTAATTGGTTTAA 1

RESULT 938
ABF33004/c
ID ABF33004 standard; DNA; 13 BP.
AC AC
XX XX
DT 21-FEB-2002 (first entry)
XX XX
DE Oligonucleotide SEQ ID NO 133001 for detecting SNP TSC0033182.
XX XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX XX
OS Homo sapiens.
XX XX
PN WO200177384-A2.
XX XX
PD 18-OCT-2001.
XX XX
PF 06-APR-2001; 2001WO-IB000713.
XX XX
PR 07-APR-2000; 2000DE-01019173.
XX XX
PA (EPIG-) EPIGENOMICS AG.
XX XX
PI Olek A, Piepenbrock C, Berlin K;
XX XX
DR WPI; 2001-657177/75.
XX XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX XX
PS Claim 1; SEQ ID NO 133001; 29pp + Sequence Listing; German.
XX XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX XX
SQ Sequence 13 BP; 5 A; 1 C; 5 G; 2 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 931 TCCTCTCTTCA 943
Db 13 TCCTCTGTATTCA 1

RESULT 939
ABF35071/c
ID ABF35071 standard; DNA; 13 BP.
XX XX

```

```

AC ABF35071;
XX XX
DT 21-FEB-2002 (first entry)
XX XX
DE Oligonucleotide SEQ ID NO 135068 for detecting SNP TSC0033671.
XX XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX XX
OS Homo sapiens.
XX XX
PN WO200177384-A2.
XX XX
PD 18-OCT-2001.
XX XX
PF 06-APR-2001; 2001WO-IB000713.
XX XX
PR 07-APR-2000; 2000DE-01019173.
XX XX
PA (EPIG-) EPIGENOMICS AG.
XX XX
PI Olek A, Piepenbrock C, Berlin K;
XX XX
DR WPI; 2001-657177/75.
XX XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX XX
PS Claim 1; SEQ ID NO 135068; 29pp + Sequence Listing; German.
XX XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX XX
SQ Sequence 13 BP; 6 A; 3 C; 1 G; 3 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGGTTTAA 952
Db 13 TTCGATGGTTTAA 1

RESULT 940
ABF35615/c
ID ABF35615 standard; DNA; 13 BP.
XX XX
AC ABF35615;
XX XX
DT 21-FEB-2002 (first entry)
XX XX
DE Oligonucleotide SEQ ID NO 135612 for detecting SNP TSC0033846.
XX XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX XX
OS Homo sapiens.
XX XX
PN WO200177384-A2.

```

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPITG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 135612; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 9 A; 3 C; 1 G; 0 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

905 TCATTTCTTTGG 917

13 TCGTTTTTTGG 1

-----

RESULT 941

ABF39996

ABF39996 standard; DNA; 13 BP.

ABF39996;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 139993 for detecting SNP TSC0035065.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPITG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

PT Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

PT

XX Claim 1; SEQ ID NO 139993; 29pp + Sequence Listing; German.

XX

CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX

CC

SQ Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 941 TCATTTGTTTAAAT 953

DB 1 TCATTTGTTTAAAT 13

-----

RESULT 942

ABF48106

ID ABF48106 standard; DNA; 13 BP.

XX

AC ABF48106;

XX

DT 21-FEB-2002 (first entry)

XX

DE Oligonucleotide SEQ ID NO 148103 for detecting SNP TSC0037394.

XX

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

XX

XX WO200177384-A2.

PN

XX

PD 18-OCT-2001.

XX

PF 06-APR-2001; 2001WO-IB000713.

XX

PR 07-APR-2000; 2000DE-01019173.

XX

XX (EPITG-) EPIGENOMICS AG.

PA

XX

PI Olek A, Piepenbrock C, Berlin K;

XX

DR WPI; 2001-657177/75.

XX

PT Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

PT

XX Claim 1; SEQ ID NO 148103; 29pp + Sequence Listing; German.

XX

CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010



SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

Claim 1; SEQ ID NO 208802; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 2 A; 5 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

926 TTATTCCTCTCT 938

1 TCTTATCACTCT 13

SULT 946

ABH43382

ABH43382 standard; DNA; 13 BP.

ABH43382;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 243359 for detecting SNP TSC0059367.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

Claim 1; SEQ ID NO 243359; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 3 A; 1 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGCTTTAA 952

Db 1 TTTATCGGTTTAA 13

RESULT 947

ABH43992

ID ABH43992 standard; DNA; 13 BP.

XX

AC ABH43992;

XX

DT 22-FEB-2002 (first entry)

XX

DE Oligonucleotide SEQ ID NO 243969 for detecting SNP TSC0059515.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

XX

PN WO200177384-A2.

XX

PD 18-OCT-2001.

XX

PF 06-APR-2001; 2001WO-IB000713.

XX

PR 07-APR-2000; 2000DE-01019173.

XX

PA (EPIG-) EPIGENOMICS AG.

XX

PI Olek A, Piepenbrock C, Berlin K;

XX

DR WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

Claim 1; SEQ ID NO 243969; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;  
  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 945 TGGTTTAACTGAT 957  
Db 1 TGATTTATGTAAT 13  
|||||  
RESULT 948  
ABH48135  
ID ABH48135 standard; DNA; 13 BP.  
XX  
AC ABH48135;  
XX  
DT 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 248112 for detecting SNP TSC0060637.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
CS Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
WPI; 2001-657177/75.  
XX  
Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
XX Claim 1; SEQ ID NO 248112; 29pp + Sequence Listing; German.  
XX  
This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX

XX  
SQ Sequence 13 BP; 3 A; 3 C; 1 G; 6 T; 0 U; 0 Other;  
  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 941 TCATTGCTTTAAT 953  
Db 1 TCATTGCTGTAAT 13  
|||||  
RESULT 949  
ABH50324/C  
ID ABH50324 standard; DNA; 13 BP.  
XX  
AC ABH50324;  
XX  
DT 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 250301 for detecting SNP TSC0061116.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
WPI; 2001-657177/75.  
XX  
Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
XX Claim 1; SEQ ID NO 250301; 29pp + Sequence Listing; German.  
XX  
This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 6 A; 0 C; 6 G; 1 T; 0 U; 0 Other;  
  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 933 CCTCCTCTCTCATT 945  
Db 13 CCTCCTCTCTATT 1  
|||||  
RESULT 950





XX WPI; 2001-657177/75.  
 XX  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 XX Claim 1; SEQ ID NO 44370; 29pp + Sequence Listing; German.  
 XX  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC000010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 XX Sequence 13 BP; 7 A; 4 C; 0 G; 2 T; 0 U; 0 Other;  
 SQ  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 945 TGGTTTAATGAT 957  
 DB 13 TGGTGATTGAT 1  
 RESULT 953  
 ABC20571/c  
 ID ABC20571 standard; DNA; 13 BP.  
 AC ABC20571;  
 XX  
 XX 20-FEB-2002 (first entry)  
 DT  
 XX  
 XX Oligonucleotide SEQ ID NO 20588 for detecting SNP TSC0004194.  
 DE  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 XX Homo sapiens.  
 OS  
 XX W0200177384-A2.  
 PN  
 XX 18-OCT-2001.  
 PD  
 XX  
 XX 06-APR-2001; 2001WO-IB000713.  
 PF  
 XX  
 XX 07-APR-2000; 2000DE-01019173.  
 PR  
 XX (EPIG-) EPIGENOMICS AG.  
 PA  
 XX Olek A, Piepenbrock C, Berlin K;  
 PI  
 XX WPI; 2001-657177/75.  
 DR  
 XX  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 XX Claim 1; SEQ ID NO 20588; 29pp + Sequence Listing; German.  
 XX  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a

CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC000010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 XX Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;  
 SQ  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 940 TTCAATGGTTTAA 952  
 DB 13 TTGATTGGTTTAA 1  
 RESULT 954  
 ABC70860  
 ID ABC70860 standard; DNA; 13 BP.  
 AC ABC70860;  
 XX  
 XX 21-FEB-2002 (first entry)  
 DT  
 XX  
 XX Oligonucleotide SEQ ID NO 70877 for detecting SNP TSC0018401.  
 DE  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 XX Homo sapiens.  
 OS  
 XX W0200177384-A2.  
 PN  
 XX 18-OCT-2001.  
 PD  
 XX  
 XX 06-APR-2001; 2001WO-IB000713.  
 PF  
 XX  
 XX 07-APR-2000; 2000DE-01019173.  
 PR  
 XX (EPIG-) EPIGENOMICS AG.  
 PA  
 XX Olek A, Piepenbrock C, Berlin K;  
 PI  
 XX WPI; 2001-657177/75.  
 DR  
 XX  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 XX Claim 1; SEQ ID NO 70877; 29pp + Sequence Listing; German.  
 XX  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC000010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 XX Sequence 13 BP; 0 A; 0 C; 3 G; 10 T; 0 U; 0 Other;  
 SQ  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

911 TCTTTGGTCTTG 923  
 1 TTTTGGTTTG 13

SULT 955  
 IC97277  
 ABC97277 standard; DNA; 13 BP.  
 ABC97277;  
 21-FEB-2002 (first entry)  
 Oligonucleotide SEQ ID NO 97294 for detecting SNP TSC0024130.  
 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 Homo sapiens.  
 WO200177384-A2.  
 18-OCT-2001.  
 06-APR-2001; 2001WO-IB000713.  
 07-APR-2000; 2000DE-01019173.  
 (EPITG-) EPIGENOMICS AG.  
 Olek A, Piepenbrock C, Berlin K;  
 WPI; 2001-657177/75.  
 Set of oligonucleotides, useful for diagnosis and cell typing, is  
 designed to detect single-nucleotide polymorphisms and cytosine  
 methylation status.  
 Claim 1; SEQ ID NO 97294; 29pp + Sequence Listing; German.  
 This invention describes novel oligonucleotide primers or peptide nucleic  
 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 and cytosine methylation status in chemically pretreated genomic DNA. The  
 oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 range of diseases including immune system, gastrointestinal, respiratory,  
 central nervous system, cardiovascular and metabolic disorders. The  
 oligomers are also used for detecting cell type differentiation. ABC00010  
 -ABC99989, ABP00010-ABP99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 represent the oligomers described in the invention. NOTE: The sequence  
 data for this patent did not form part of the printed specification, but  
 was obtained in electronic format from WIPO at  
 ftp.wipo.int/pub/published\_pct\_sequences  
 Sequence 13 BP; 2 A; 7 C; 0 G; 4 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

924 CCTTTATCCCTC 936  
 1 CCTTTATCCAC 13

SULT 956  
 C25060/c  
 ABC25060 standard; DNA; 13 BP.  
 ABC25060;  
 20-FEB-2002 (first entry)  
 Oligonucleotide SEQ ID NO 25352 for detecting SNP TSC0006236.  
 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 Homo sapiens.  
 WO200177384-A2.  
 18-OCT-2001.

DT 20-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide SEQ ID NO 25077 for detecting SNP TSC0006091.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200177384-A2.  
 XX  
 PD 18-OCT-2001.  
 XX  
 PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 PR 07-APR-2000; 2000DE-01019173.  
 XX  
 PA (EPITG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 XX WPI; 2001-657177/75.  
 DR  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 PT  
 XX Claim 1; SEQ ID NO 25077; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABP00010-ABP99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 3 A; 0 C; 8 G; 2 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 930 ATCCCTCCTCTTC 942  
 13 ATCCCTCCTCTTC 1  
 Db

RESULT 957  
 ABC25335/c  
 ID ABC25335 standard; DNA; 13 BP.  
 XX  
 AC ABC25335;  
 XX  
 XX 20-FEB-2002 (first entry)  
 DT  
 XX Oligonucleotide SEQ ID NO 25352 for detecting SNP TSC0006236.  
 DE  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200177384-A2.  
 XX  
 PD 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX Claim 1; SEQ ID NO 25352; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX Sequence 13 BP; 10 A; 3 C; 0 G; 0 T; 0 U; 0 Other;  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 909 TTTCTTTGGTCTT 921  
DB 13 TTTTGGGTTT 1  
RESULT 958  
ABC75662/c  
ID ABC75662 standard; DNA; 13 BP.  
XX ABC75662;  
AC  
XX 21-FEB-2002 (first entry)  
DT  
XX Oligonucleotide SEQ ID NO 75679 for detecting SNP TSC0019401.  
DE  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
OS  
XX WO200177384-A2.  
FN  
XX 18-OCT-2001.  
PD  
XX 06-APR-2001; 2001WO-IB000713.  
PP  
XX 07-APR-2000; 2000DE-01019173.  
PR  
XX (EPIG-) EPIGENOMICS AG.  
PA  
XX Olek A, Piepenbrock C, Berlin K;  
PI  
XX WPI; 2001-657177/75.  
DR  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.

PT methylation status.  
XX Claim 1; SEQ ID NO 75679; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX Sequence 13 BP; 4 A; 0 C; 7 G; 2 T; 0 U; 0 Other;  
XX  
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 931 TCCCTCCTCTTCA 943  
DB 13 TCCATCCTCTCCA 1  
RESULT 959  
ABC54452  
ID ABC54452 standard; DNA; 13 BP.  
XX ABC54452;  
AC  
XX 21-FEB-2002 (first entry)  
DT  
XX Oligonucleotide SEQ ID NO 54469 for detecting SNP TSC0014932.  
DE  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
OS  
XX WO200177384-A2.  
FN  
XX 18-OCT-2001.  
PD  
XX 06-APR-2001; 2001WO-IB000713.  
PP  
XX 07-APR-2000; 2000DE-01019173.  
PR  
XX (EPIG-) EPIGENOMICS AG.  
PA  
XX Olek A, Piepenbrock C, Berlin K;  
PI  
XX WPI; 2001-657177/75.  
DR  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX Claim 1; SEQ ID NO 54469; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence

```
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 5 A; 0 C; 1 G; 7 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. NO. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

941 TCATTGGTTTAA 953
||| ||| ||| |||
1 TTAATTGGTTTAA 13

SULT 960
ABF04677/c
ABF04677 standard; DNA; 13 BP.
ABF04677;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 104674 for detecting SNP TSC0026175.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB0000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 104674; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 9 A; 3 C; 0 G; 1 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. NO. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

911 TCATTGGTTTGG 923
||| ||| ||| |||
13 TTAATTGGTTTGG 13

data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 5 A; 0 C; 1 G; 7 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. NO. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

941 TCATTGGTTTAA 953
||| ||| ||| |||
1 TTAATTGGTTTAA 13

SULT 960
ABF04677/c
ABF04677 standard; DNA; 13 BP.
ABF04677;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 104674 for detecting SNP TSC0026175.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB0000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 104674; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 9 A; 3 C; 0 G; 1 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. NO. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

911 TCATTGGTTTGG 923
||| ||| ||| |||
13 TTAATTGGTTTGG 13
```

```
RESULT 961
ABF12122
ID ABF12122 standard; DNA; 13 BP.
XX
AC ABF12122;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 112119 for detecting SNP TSC0027988.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB0000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 112119; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. NO. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGGTTTAA 952
||| ||| ||| |||
1 TTAATTGGTTTAA 13
DB

RESULT 962
ABF14858
ID ABF14858 standard; DNA; 13 BP.
XX
AC ABF14858;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 114855 for detecting SNP TSC0028764.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
```

KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 XM central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 OS Homo sapiens.  
 PN WO200177384-A2.  
 XX 18-OCT-2001.  
 PD 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 PF (EPIG-) EPIGENOMICS AG.  
 PR Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 114855; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and AB100010-AB182073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 905 TCATTTCTTTGG 917  
 Db 1 TAATTTTTTTGG 13  
 RESULT 963  
 ABC91400  
 ID ABC91400 standard; DNA; 13 BP.  
 AC ABC91400;  
 XX 21-FEB-2002 (first entry)  
 DE Oligonucleotide SEQ ID NO 91417 for detecting SNP TSC0022889.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 OS WO200177384-A2.  
 XX 18-OCT-2001.  
 PD 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 PF (EPIG-) EPIGENOMICS AG.  
 PR Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 127945; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic

PA (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 91417; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and AB100010-AB182073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 908 TTTTCTTTGGCT 920  
 Db 1 TTTATTGTGTAT 13  
 RESULT 964  
 ABF27948/C  
 ID ABF27948 standard; DNA; 13 BP.  
 AC ABF27948;  
 XX 21-FEB-2002 (first entry)  
 DE Oligonucleotide SEQ ID NO 127945 for detecting SNP TSC0032026.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 OS WO200177384-A2.  
 XX 18-OCT-2001.  
 PD 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 PF (EPIG-) EPIGENOMICS AG.  
 PR Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 127945; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 6 A; 0 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

932 CCTCTCTCTTCAT 944  
|||||  
13 CCTCTCTCTTCAT 1

RESULT 965  
ABF29010  
ABF29010 standard; DNA; 13 BP.

ABF29010;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 129007 for detecting SNP TSC0032298.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 129007; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 2 A; 0 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGGTTTAAAT 953

Db 1 TTATTGGTTTAACT 13

RESULT 966  
ABF31354/c  
ABF31354 standard; DNA; 13 BP.

XX AC ABF31354;

XX DT 21-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 131351 for detecting SNP TSC0032783.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX PN WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB0000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX DR WPI; 2001-657177/75.

XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX PS Claim 1; SEQ ID NO 131351; 29pp + Sequence Listing; German.

XX CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX SQ Sequence 13 BP; 7 A; 0 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 931 TCCCTCTCTTCTCA 943

Db 13 TCCCTCTCTTCTCA 1

RESULT 967  
ABF39539/c  
ABF39539 standard; DNA; 13 BP.

```

XX ABF39539;
AC
XX
XX 21-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 139536 for detecting SNP TSC0034938.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX
XX WO200177384-A2.
EN
XX
XX 18-OCT-2001.
PD
XX
XX 06-APR-2001; 2001WO-IB000713.
PF
XX
XX 07-APR-2000; 2000DE-01019173.
PR
XX
XX (EPIG-) EPIGENOMICS AG.
PA
XX
XX Olek A, Piepenbrock C, Berlin K;
PI
XX
XX WPI; 2001-657177/75.
DR
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
PT
XX
XX Claim 1; SEQ ID NO 139536; 29pp + Sequence Listing; German.
PS
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
SQ
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGGTTTAATGTA 956
DB 13 TTGATTGATGTA 1
||| ||||| |||
||| ||||| |||

RESULT 968
ABF44206/c
ID ABF44206 standard; DNA; 13 BP.
XX
XX
XX ABF44206;
AC
XX
XX 21-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 144203 for detecting SNP TSC0036250.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX

```

```

PN WO200177384-A2.
XX
XX 18-OCT-2001.
PD
XX
XX 06-APR-2001; 2001WO-IB000713.
PF
XX
XX 07-APR-2000; 2000DE-01019173.
PR
XX
XX (EPIG-) EPIGENOMICS AG.
PA
XX
XX Olek A, Piepenbrock C, Berlin K;
PI
XX
XX WPI; 2001-657177/75.
DR
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
PT
XX
XX Claim 1; SEQ ID NO 144203; 29pp + Sequence Listing; German.
PS
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 5 A; 0 C; 5 G; 3 T; 0 U; 0 Other;
SQ
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 933 CCTCCTCTTCATT 945
DB 13 CCACCTCTTAATT 1
||| ||||| |||
||| ||||| |||

RESULT 969
ABF97336/c
ID ABF97336 standard; DNA; 13 BP.
XX
XX
XX ABF97336;
AC
XX
XX 22-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 197333 for detecting SNP TSC0048564.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX
XX WO200177384-A2.
EN
XX
XX 18-OCT-2001.
PD
XX
XX 06-APR-2001; 2001WO-IB000713.
PF
XX
XX 07-APR-2000; 2000DE-01019173.
PR
XX
XX (EPIG-) EPIGENOMICS AG.
PA
XX
XX Olek A, Piepenbrock C, Berlin K;
PI
XX
XX WPI; 2001-657177/75.
DR

```

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 197333; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 4 A; 0 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

925 CTTTATCCCTCC 937  
13 CCTATATCCCTCC 1

RESULT 970  
ABF98050  
ABF98050 standard; DNA; 13 BP.  
ABF98050;  
22-FEB-2002 (first entry)  
Oligonucleotide SEQ ID NO 198047 for detecting SNP TSC0048746.  
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.  
Homo sapiens.  
WO200177384-A2.  
18-OCT-2001.  
06-APR-2001; 2001WO-IB000713.  
07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 198047; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

oligomers are also used for detecting cell type differentiation. ABC00010 -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 2 A; 0 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

944 TTGTTTAAATGTA 956  
1 TTGTTTAAATGTA 13

RESULT 971  
ABF48102  
ID ABF48102 standard; DNA; 13 BP.  
XX AC ABF48102;  
XX DT 21-FEB-2002 (first entry)  
XX DE Oligonucleotide SEQ ID NO 148099 for detecting SNP TSC0037394.  
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX OS Homo sapiens.  
XX PN WO200177384-A2.  
XX PD 18-OCT-2001.  
XX PF 06-APR-2001; 2001WO-IB000713.  
XX PR 07-APR-2000; 2000DE-01019173.  
XX PA (EPIG-) EPIGENOMICS AG.  
XX PI Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 148099; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;



QY 944 TTGGTTTAATGTA 956  
 DB 1 TTGGTTTAATGGA 13

RESULT 972  
 ABH23623/C  
 ID ABH23623 standard; DNA; 13 BP.  
 XX  
 AC ABH23623;  
 XX  
 DT 22-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide SEQ ID NO 223600 for detecting SNP TSC0054425.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 CS Homo sapiens.  
 XX  
 PN WO200177384-A2.  
 XX  
 PD 18-OCT-2001.  
 XX  
 PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 PR 07-APR-2000; 2000DE-01019173.  
 XX  
 PA (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 DR WPI; 2001-657177/75.  
 XX  
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 PS Claim 1; SEQ ID NO 223600; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 10 A; 3 C; 0 G; 0 T; 0 U; 0 Other;  
 XX  
 CC Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 CC Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 CC Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 XX  
 QY 910 TTCTTGGTCTTT 922  
 DB 13 TTCTTGGTCTTT 1

RESULT 973  
 ABH28586  
 ID ABH28586 standard; DNA; 13 BP.  
 XX  
 AC ABH28586;  
 XX  
 DT 22-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide SEQ ID NO 179430 for detecting SNP TSC0044419.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 CS Homo sapiens.  
 XX  
 PN WO200177384-A2.  
 XX  
 PD 18-OCT-2001.  
 XX  
 PF 06-APR-2001; 2001WO-IB000713.  
 XX

DE Oligonucleotide SEQ ID NO 228563 for detecting SNP TSC0009481.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 CS Homo sapiens.  
 XX  
 PN WO200177384-A2.  
 XX  
 PD 18-OCT-2001.  
 XX  
 PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 PR 07-APR-2000; 2000DE-01019173.  
 XX  
 PA (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 DR WPI; 2001-657177/75.  
 XX  
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 PS Claim 1; SEQ ID NO 228563; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 3 A; 0 C; 1 G; 9 T; 0 U; 0 Other;  
 XX  
 CC Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 CC Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 CC Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 XX  
 QY 944 TTGGTTTAATGTA 956  
 DB 1 TTGGTTTAATTTA 13

RESULT 974  
 ABF79433  
 ID ABF79433 standard; DNA; 13 BP.  
 XX  
 AC ABF79433;  
 XX  
 DT 22-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide SEQ ID NO 179430 for detecting SNP TSC0044419.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 CS Homo sapiens.  
 XX  
 PN WO200177384-A2.  
 XX  
 PD 18-OCT-2001.  
 XX  
 PF 06-APR-2001; 2001WO-IB000713.  
 XX

07-APR-2000; 2000DE-01019173.  
(EPiG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
Claim 1; SEQ ID NO 179430; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
Sequence 13 BP; 2 A; 4 C; 0 G; 7 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
924 CCTTTATCCCTC 936  
|||||||  
1 CCTTTATCTTC 13  
SULT 975  
H32574/C  
ABH32574 standard; DNA; 13 BP.  
ABH32574;  
22-FEB-2002 (first entry)  
Oligonucleotide SEQ ID NO 232551 for detecting SNP TSC0056713.  
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.  
Homo sapiens.  
WO200177384-A2.  
18-OCT-2001.  
06-APR-2001; 2001WO-IB000713.  
07-APR-2000; 2000DE-01019173.  
(EPiG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

PS Claim 1; SEQ ID NO 232551; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
XX Sequence 13 BP; 5 A; 0 C; 7 G; 1 T; 0 U; 0 Other;  
SQ Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 924 CCTTTATCCCTC 936  
DB 13 CCATTCTCCCTC 1  
RESULT 976  
ABF57605/C  
ID ABF57605 standard; DNA; 13 BP.  
XX AC ABF57605;  
XX DT 21-FEB-2002 (first entry)  
XX DE Oligonucleotide SEQ ID NO 157602 for detecting SNP TSC0039698.  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPiG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
XX Claim 1; SEQ ID NO 157602; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

```

CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 943 ATTGGTTTAATGT 955
DB ||||| |||||
13 ATTGGTATAATTT 1

RESULT 977
ABF58738/c
ID ABF58738 standard; DNA; 13 BP.
XX
AC ABF58738;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 158735 for detecting SNP TSC0039945.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
FN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
XX
Claim 1; SEQ ID NO 158735; 29pp + Sequence Listing; German.
XX
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 1 C; 3 G; 3 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGCTTTAAT 953
DB ||||| |||||
13 TCATTGCTTCAAT 1

RESULT 978
ABH35195
ID ABH35195 standard; DNA; 13 BP.
XX
AC ABH35195;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 235172 for detecting SNP TSC0057429.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
FN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
XX
Claim 1; SEQ ID NO 235172; 29pp + Sequence Listing; German.
XX
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 0 A; 4 C; 0 G; 9 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 926 TTTTATCCCTCCT 938
DB ||||| |||||
1 TTTTCTCTCCT 13

RESULT 979
ABH35272
ID ABH35272 standard; DNA; 13 BP.
XX
AC ABH35272;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 235249 for detecting SNP TSC0057443.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

```

Homo sapiens.  
WO200177384-A2.  
18-OCT-2001.  
06-APR-2001; 2001WO-IB000713.  
07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
Claim 1; SEQ ID NO 235249; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABCG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
Sequence 13 BP; 1 A; 0 C; 2 G; 10 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
1 GGTATTATTTT 13  
903 GGTCAATTTCTTT 915  
|||||  
1 GGTATTATTTT 13  
SULT 980  
H35273/C  
ABH35273 standard; DNA; 13 BP.  
ABH35273;  
22-FEB-2002 (first entry)  
Oligonucleotide SEQ ID NO 235250 for detecting SNP TSC0057443.  
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.  
Homo sapiens.  
WO200177384-A2.  
18-OCT-2001.  
06-APR-2001; 2001WO-IB000713.  
07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.

PI Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
XX Claim 1; SEQ ID NO 235250; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABCG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 10 A; 2 C; 0 G; 1 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 903 GGTCAATTTCTTT 915  
|||||  
Db 13 GGTATTATTTT 1  
RESULT 981  
ABH11913  
ID ABH11913 standard; DNA; 13 BP.  
XX  
XX AC ABH11913;  
XX  
XX DT 22-FEB-2002 (first entry)  
XX  
XX DE Oligonucleotide SEQ ID NO 211890 for detecting SNP TSC0051655.  
XX  
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX OS Homo sapiens.  
XX  
XX PN WO200177384-A2.  
XX  
XX PD 18-OCT-2001.  
XX  
XX PF 06-APR-2001; 2001WO-IB000713.  
XX  
XX PR 07-APR-2000; 2000DE-01019173.  
XX  
XX PA (EPIG-) EPIGENOMICS AG.  
XX  
XX PI Olek A, Piepenbrock C, Berlin K;  
XX  
XX DR WPI; 2001-657177/75.  
XX  
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX  
XX PS Claim 1; SEQ ID NO 211890; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 2 A; 2 C; 0 G; 9 T; 0 U; 0 Other;  
  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 918 TCCTTGCTTTTA 930  
DB 1 TATTTCTTTTA 13  
  
RESULT 982  
ABF62876/c  
ID ABF62876 standard; DNA; 13 BP.  
XX  
AC ABF62876;  
XX  
DT 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 162873 for detecting SNP TSC0040950.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
PN WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 162873; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 3 A; 0 C; 8 G; 2 T; 0 U; 0 Other;  
  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 918 TCCTTGCTTTTA 930  
DB 1 TATTTCTTTTA 13  
  
RESULT 984  
ABH49488  
ID ABH49488 standard; DNA; 13 BP.  
XX  
AC ABH49488;  
XX  
DT 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 165503 for detecting SNP TSC0041502.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
PN WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 165503; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 2 A; 1 C; 4 G; 6 T; 0 U; 0 Other;  
  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 940 TTCATTGGTTTAA 952  
DB 1 TTCGGTGGTTTAA 13  
  
RESULT 984  
ABH49488  
ID ABH49488 standard; DNA; 13 BP.  
XX  
AC ABH49488;  
XX

Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 932 CCTTCCTCTTCAT 944  
DB 13 CCTCCACCTCAT 1  
  
RESULT 983  
ABF65506  
ID ABF65506 standard; DNA; 13 BP.  
XX  
AC ABF65506;  
XX  
DT 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 165503 for detecting SNP TSC0041502.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
PN WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 165503; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 2 A; 1 C; 4 G; 6 T; 0 U; 0 Other;  
  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 940 TTCATTGGTTTAA 952  
DB 1 TTCGGTGGTTTAA 13  
  
RESULT 984  
ABH49488  
ID ABH49488 standard; DNA; 13 BP.  
XX  
AC ABH49488;  
XX



PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

XX Claim 1; SEQ ID NO 18728; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 10 A; 2 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 909 TTCTTTGGTCTT 921

DB 13 TTTTGTGTTAT 1

RESULT 987

ABC01431/c

ID ABC01431 standard; DNA; 13 BP.

XX ABC01431;

XX 20-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 1422 for detecting SNP TSC0000501.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

XX Claim 1; SEQ ID NO 1422; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073

CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGGTTAA 952

DB 13 TTTATTGGTTAA 1

RESULT 988

ABC76532

ID ABC76532 standard; DNA; 13 BP.

XX ABC76532;

XX 21-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 76549 for detecting SNP TSC0019571.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

XX Claim 1; SEQ ID NO 76549; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 0 A; 0 C; 3 G; 10 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 910 TTCTTTGGTCTTT 922

DB 13 TTTTGTGTTAT 1

1 TTGTTGGTTTT 13

SULT 989

C02476

ABC02476 standard; DNA; 13 BP.

ABC02476;

20-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 2467 for detecting SNP TSC0000994.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

Claim 1; SEQ ID NO 2467; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 4 A; 0 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

943 ATTGGTTTAATGT 955

|||||  
1 ATAGTGTAATGT 13

SULT 990

C09420/C

ABC09420 standard; DNA; 13 BP.

ABC09420;

20-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 9411 for detecting SNP TSC0002484.

KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.

XX Claim 1; SEQ ID NO 9411; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 9 A; 1 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 918 TCCTTGCCTTTTA 930

|||||  
13 TCCTTTCGTTTTA 1

RESULT 991

ABC85813/C

ID ABC85813 standard; DNA; 13 BP.

XX ABC85813;

XX 21-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 85830 for detecting SNP TSC0021562.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.





```
Sequence 13 BP; 7 A; 5 C; 0 G; 1 T; 0 U; 0 Other;
Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

944 TTGGTTTAATGTA 956
|||||
13 TTGGTTTGGTGTA 1

RESULT 994
ABF20843 standard; DNA; 13 BP.
ABF20843;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 120840 for detecting SNP TSC0030156.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 120840; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 9 A; 1 C; 0 G; 3 T; 0 U; 0 Other;
Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

945 TTGGTTTAATGTA 957
|||||
13 TTGTTTAATTTAT 1

SULT. 995
F35614
```

```

ID ABF35614 standard; DNA; 13 BP.
XX
AC ABF35614;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 135611 for detecting SNP TSC0033846.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 135611; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 0 A; 1 C; 3 G; 9 T; 0 U; 0 Other;
Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 905 TCATTTTCTTTGG 917
|||
Db 1 TCGTTTTTTTGG 13

RESULT 996
ABF95598 standard; DNA; 13 BP.
ID ABF95598;
XX
AC ABF95598;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 195595 for detecting SNP TSC0048124.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
```



central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 0 A; 0 C; 4 G; 9 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

911 TCTTTGGTCTTTG 923

1 TTTTGGTGTGG 13

RESULT 999

ABF51815/c

ABF51815 standard; DNA; 13 BP.

ABF51815;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 151812 for detecting SNP TSC0038352.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIS-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 151812; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGGTTAA 952

Db 13 TTTATGGATTAA 1

RESULT 1000

ABF52196/c

ID ABF52196 standard; DNA; 13 BP.

XX ABF52196;

XX 21-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 152193 for detecting SNP TSC0038456.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIS-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 152193; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 10 A; 0 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 918 TCTTTGCCCTTTTA 930

Db 13 TCTTTTCCTTTTA 1

RESULT 1001

ABF77449

ID ABF77449 standard; DNA; 13 BP.

XX ABF77449;

XX 22-FEB-2002 (first entry)



Claim 1; SEQ ID NO 182697; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 4 A; 0 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

947 GTTAAATGATCG 959

|||||  
1 GTGTAATGATAG 13

RESULT 1004

ABF63798/c

ABF63798 standard; DNA; 13 BP.

ABF63798;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 163795 for detecting SNP TSC0010383.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 163795; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but

CC was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 6 A; 0 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 932 CCTCTCTTTCAT 944

|||||  
13 CCTCTCTTTCCT 1

RESULT 1005

ABF64970/c

ID ABF64970 standard; DNA; 13 BP.

XX

AC ABF64970;

DT 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 164967 for detecting SNP TSC0006375.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 164967; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 7 A; 0 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 927 TTTATCTCTCTC 939

|||||  
13 TTTATCTCTACT 1

```
RESULT 1006
ABH56043/C
ID ABH56043 standard; DNA; 13 BP.
XX AC ABH56043;
XX DT 22-FEB-2002 (first entry)
XX DE
XX KW Oligonucleotide SEQ ID NO 256020 for detecting SNP TSC0062378.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX DT 18-OCT-2001.
XX DE
XX KW Set of oligonucleotides, useful for diagnosis and cell typing, is
XX KW designed to detect single-nucleotide polymorphisms and cytosine
XX KW methylation status.
XX PP 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX PI WPI; 2001-657177/75.
XX DR
XX DE Set of oligonucleotides, useful for diagnosis and cell typing, is
XX DE designed to detect single-nucleotide polymorphisms and cytosine
XX DE methylation status.
XX PS Claim 1; SEQ ID NO 256020; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX CC
XX SQ Sequence 13 BP; 7 A; 4 C; 0 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 943 ATTGGTTTATGT 955
DB 13 ATTGGTTTATGT 1
XX
RESULT 1007
ABC79543/C
ID ABC79543 standard; DNA; 13 BP.
XX AC ABC79543;
XX DT 21-FEB-2002 (first entry)
XX DE
XX KW Oligonucleotide SEQ ID NO 79560 for detecting SNP TSC0020207.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
```

```
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX PN WO200177384-A2.
XX DT 18-OCT-2001.
XX DE
XX KW 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX PI WPI; 2001-657177/75.
XX DR
XX DE Set of oligonucleotides, useful for diagnosis and cell typing, is
XX DE designed to detect single-nucleotide polymorphisms and cytosine
XX DE methylation status.
XX PS Claim 1; SEQ ID NO 79560; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX CC
XX SQ Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 940 TTCATTGGTTTAA 952
DB 13 TTGTTGGTTTAA 1
XX
RESULT 1008
ABC09416/C
ID ABC09416 standard; DNA; 13 BP.
XX AC ABC09416;
XX DT 20-FEB-2002 (first entry)
XX DE
XX KW Oligonucleotide SEQ ID NO 9407 for detecting SNP TSC0002484.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX DT 18-OCT-2001.
XX DE
XX KW 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
```

Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
Claim 1; SEQ ID NO 9407; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABT00010-ABT82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
Sequence 13 BP; 9 A; 0 C; 2 G; 2 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
13 TCTTTTCATTTTA 1  
918 TCTTTGCCCTTTTA 930  
|||||  
13 TCTTTTCATTTTA 1  
-SULT 1009  
-C09421  
ABC09421 standard; DNA; 13 BP.  
ABC09421;  
20-FEB-2002 (first entry)  
Oligonucleotide SEQ ID NO 9412 for detecting SNP TSC0002484.  
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.  
Homo sapiens.  
WO200177384-A2.  
18-OCT-2001.  
06-APR-2001; 2001WO-IB000713.  
07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
Claim 1; SEQ ID NO 9412; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABT00010-ABT82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 1 A; 2 C; 1 G; 9 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
OY 918 TCTTTGCCCTTTTA 930  
|||||  
Db 1 TCTTTTCGTTTTA 13  
-RESULT 1010  
-ABC36697/c  
ID ABC36697 standard; DNA; 13 BP.  
XX AC ABC36697;  
XX AC ABC36697;  
XX 20-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 36714 for detecting SNP TSC0011500.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 36714; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABT00010-ABT82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;



```

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 945 TGGTTTAATGTAT 957
DB 13 TGGTTTATTGTAT 1

RESULT 1011
ABC39368
ID ABC39368 standard; DNA; 13 BP.
XX
AC ABC39368;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 39385 for detecting SNP TSC0012055.
XX
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 39385; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TGGTTTAATGTAT 956
DB 1 TGGTTTATTATTA 13

RESULT 1012
ABC64466/c
ID ABC64466 standard; DNA; 13 BP.
XX

```

```

AC ABC64466;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 64483 for detecting SNP TSC0017004.
XX
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 64483; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 5 A; 0 C; 5 G; 3 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 931 TCCCTCCTCTTCA 943
DB 13 TCCATACCTCTTCA 1

RESULT 1013
ABC65244
ID ABC65244 standard; DNA; 13 BP.
XX
AC ABC65244;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 65261 for detecting SNP TSC0017182.
XX
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX

```



CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX

SQ Sequence 13 BP; 8 A; 0 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 921 TTGCTTTTATCC 933

DB 13 TTATCTTTTATCC 1

RESULT 1016

ABF95599  
 ID ID ABF95599 standard; DNA; 13 BP.

AC ABF95599;

DT 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 195596 for detecting SNP TSC0048124.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

PN WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

PI Olek A, Piepenbrock C, Berlin K;

DR WPI; 2001-657177/75.

PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

PS Claim 1; SEQ ID NO 195596; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX

SQ Sequence 13 BP; 2 A; 3 C; 0 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 920 TTTGCTTTTATC 932

DB 1 TTTCACCTTTTATC 13

RESULT 1017

ABH21401  
 ID ABH21401 standard; DNA; 13 BP.

AC ABH21401;

DT 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 221378 for detecting SNP TSC0053879.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

PN WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

PI Olek A, Piepenbrock C, Berlin K;

DR WPI; 2001-657177/75.

PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

PS Claim 1; SEQ ID NO 221378; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX

SQ Sequence 13 BP; 0 A; 7 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 928 TTATCCCTCCCTCT 940

DB 1 TTTTCCCTCCCT 13

RESULT 1018

ABF52197  
 ID ABF52197 standard; DNA; 13 BP.

AC ABF52197;

DT 21-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 152194 for detecting SNP TSC0038456.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

Claim 1; SEQ ID NO 152194; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 1 A; 2 C; 0 G; 10 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

918 TCTTGGCCTTTA 930

||||| |||||  
1 TCTTTCCTTTTA 13

SULT 1019

H29804/C

ABH29804 standard; DNA; 13 BP.

ABH29804;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 229781 for detecting SNP TSC0056047.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

PR 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

PA Olek A, Piepenbrock C, Berlin K;

PI WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is

PT designed to detect single-nucleotide polymorphisms and cytosine

PT methylation status.

XX Claim 1; SEQ ID NO 229781; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic

CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

CC and cytosine methylation status in chemically pretreated genomic DNA. The

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a

CC range of diseases including immune system, gastrointestinal, respiratory,

CC central nervous system, cardiovascular and metabolic disorders. The

CC oligomers are also used for detecting cell type differentiation. ABC00010

CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073

CC represent the oligomers described in the invention. NOTE: The sequence

CC data for this patent did not form part of the printed specification, but

CC was obtained in electronic format from WIPO at

CC ftp.wipo.int/pub/published\_pct\_sequences

XX SQ Sequence 13 BP; 7 A; 0 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 931 TCCCTCCCTCTCA 943

||||| |||||

13 TCCCTCCCTTTCA 1

RESULT 1020

ABH08824/C

ID ABH08824 standard; DNA; 13 BP.

XX AC ABH08824;

XX DT 22-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 208801 for detecting SNP TSC0080529.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB0000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is

XX PT designed to detect single-nucleotide polymorphisms and cytosine

XX PT methylation status.

XX Claim 1; SEQ ID NO 208801; 29pp + Sequence Listing; German.

XX CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX CC  
SQ Sequence 13 BP; 6 A; 0 C; 5 G; 2 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 926 TTTTATCCCTCCT 938  
DB 13 TCTATCACTCCT 1  
RESULT 1021  
ABH10320/C  
ID ABH10320 standard; DNA; 13 BP.  
XX AC  
XX ABH10320;  
XX DT  
XX 22-FEB-2002 (first entry)  
XX DE Oligonucleotide SEQ ID NO 210297 for detecting SNP TSC0005129.  
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX OS Homo sapiens.  
XX PN W0200177384-A2.  
XX PD 18-OCT-2001.  
XX PF 06-APR-2001; 2001WO-IB000713.  
XX PR 07-APR-2000; 2000DE-01019173.  
XX PA (EPIG-) EPIGENOMICS AG.  
XX PI Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX Claim 1; SEQ ID NO 210297; 29pp + Sequence Listing; German.  
XX CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences

XX SQ Sequence 13 BP; 7 A; 0 C; 3 G; 3 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 937 CTCCTCATTTGGTT 949  
DB 13 CTCCTCATTAATT 1  
RESULT 1022  
ABH15749/C  
ID ABH15749 standard; DNA; 13 BP.  
XX AC  
XX ABH15749;  
XX DT 22-FEB-2002 (first entry)  
XX DE Oligonucleotide SEQ ID NO 215726 for detecting SNP TSC00052470.  
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX OS Homo sapiens.  
XX PN W0200177384-A2.  
XX PD 18-OCT-2001.  
XX PF 06-APR-2001; 2001WO-IB000713.  
XX PR 07-APR-2000; 2000DE-01019173.  
XX PA (EPIG-) EPIGENOMICS AG.  
XX PI Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX Claim 1; SEQ ID NO 215726; 29pp + Sequence Listing; German.  
XX CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX CC  
SQ Sequence 13 BP; 8 A; 1 C; 0 G; 4 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 940 TTCATTGGTTTAA 952  
DB 13 TTAATTGTTTAA 1  
RESULT 1023



XX WPI; 2001-657177/75.

XX

PT Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

PT

XX

XX Claim 1; SEQ ID NO 256017; 29pp + Sequence Listing; German.

XX

CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a CC range of diseases including immune system, gastrointestinal, respiratory, CC central nervous system, cardiovascular and metabolic disorders. The CC oligomers are also used for detecting cell type differentiation. ABC00010 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 CC represent the oligomers described in the invention. NOTE: The sequence CC data for this patent did not form part of the printed specification, but CC was obtained in electronic format from WIPO at CC ftp.wipo.int/pub/published\_pct\_sequences

XX

XX Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

XX

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 943 ATTGGTTAATGT 955

|||||

Do 1 ATTGGTTAATGT 13

RESULT 1026

ABC17628

ID ABC17628 standard; DNA; 13 BP.

XX

AC ABC17628;

XX

XX 20-FEB-2002 (first entry)

XX

XX Oligonucleotide SEQ ID NO 17635 for detecting SNP TSC0003780.

XX

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX

XX Homo sapiens.

XX

XX WO200177384-A2.

XX

PD 18-OCT-2001.

XX

XX 06-APR-2001; 2001WO-IB000713.

XX

XX 07-APR-2000; 2000DE-01019173.

XX

XX (EPIG-) EPIGENOMICS AG.

XX

XX Olek A, Piepenbrock C, Berlin K;

XX

XX WPI; 2001-657177/75.

XX

XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX

XX Claim 1; SEQ ID NO 17635; 29pp + Sequence Listing; German.

XX

CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a

CC range of diseases including immune system, gastrointestinal, respiratory, CC central nervous system, cardiovascular and metabolic disorders. The CC oligomers are also used for detecting cell type differentiation. ABC00010 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 CC represent the oligomers described in the invention. NOTE: The sequence CC data for this patent did not form part of the printed specification, but CC was obtained in electronic format from WIPO at CC ftp.wipo.int/pub/published\_pct\_sequences

XX

XX Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;

XX

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGGTTAA 952

|||||

Db 1 TTCATTGGTTAA 13

RESULT 1027

ABC52233

ID ABC52233 standard; DNA; 13 BP.

XX

AC ABC52233;

XX

XX 21-FEB-2002 (first entry)

XX

XX Oligonucleotide SEQ ID NO 52250 for detecting SNP TSC0014524.

XX

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX

XX Homo sapiens.

XX

XX WO200177384-A2.

XX

PD 18-OCT-2001.

XX

XX 06-APR-2001; 2001WO-IB000713.

XX

XX 07-APR-2000; 2000DE-01019173.

XX

XX (EPIG-) EPIGENOMICS AG.

XX

XX Olek A, Piepenbrock C, Berlin K;

XX

XX WPI; 2001-657177/75.

XX

XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX

XX Claim 1; SEQ ID NO 52250; 29pp + Sequence Listing; German.

XX

CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a CC range of diseases including immune system, gastrointestinal, respiratory, CC central nervous system, cardiovascular and metabolic disorders. The CC oligomers are also used for detecting cell type differentiation. ABC00010 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 CC represent the oligomers described in the invention. NOTE: The sequence CC data for this patent did not form part of the printed specification, but CC was obtained in electronic format from WIPO at CC ftp.wipo.int/pub/published\_pct\_sequences

XX

XX Sequence 13 BP; 0 A; 5 C; 0 G; 8 T; 0 U; 0 Other;

XX

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

926 TTTATCCTCTCT 938  
 ||||| |||||  
 1 TTTTCTCTCTCT 13

RESULT 1028  
 ID C53413/c  
 ABC53413 standard; DNA; 13 BP.  
 ABC53413;  
 21-FEB-2002 (first entry)  
 Oligonucleotide SEQ ID NO 53430 for detecting SNP TSC0014750.  
 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 Homo sapiens.  
 WO200177384-A2.  
 18-OCT-2001.  
 06-APR-2001; 2001WO-IB000713.  
 07-APR-2000; 2000DE-01019173.  
 (EPIG-) EPIGENOMICS AG.  
 Olek A, Piepenbrock C, Berlin K;  
 WPI; 2001-657177/75.  
 Set of oligonucleotides, useful for diagnosis and cell typing, is  
 designed to detect single-nucleotide polymorphisms and cytosine  
 methylation status.  
 Claim 1; SEQ ID NO 53430; 29pp + Sequence Listing; German.  
 This invention describes novel oligonucleotide primers or peptide nucleic  
 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 and cytosine methylation status in chemically pretreated genomic DNA. The  
 oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 range of diseases including immune system, gastrointestinal, respiratory,  
 central nervous system, cardiovascular and metabolic disorders. The  
 oligomers are also used for detecting cell type differentiation. ABC00010  
 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 represent the oligomers described in the invention. NOTE: The sequence  
 data for this patent did not form part of the printed specification, but  
 was obtained in electronic format from WIPO at  
 ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 6 A; 2 C; 0 G; 5 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

940 TTCATTGGTTAA 952  
 ||||| |||||  
 13 TTAATGTTTAA 1

RESULT 1029  
 ID F06602/c  
 ABF06602 standard; DNA; 13 BP.  
 ABF06602;  
 21-FEB-2002 (first entry)  
 Oligonucleotide SEQ ID NO 106600 for detecting SNP TSC0026700.  
 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 Homo sapiens.  
 WO200177384-A2.  
 18-OCT-2001.

DT 21-FEB-2002 (first entry)  
 XX Oligonucleotide SEQ ID NO 106599 for detecting SNP TSC0026700.  
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 OS  
 XX WO200177384-A2.  
 PN  
 XX 18-OCT-2001.  
 PD  
 XX 06-APR-2001; 2001WO-IB000713.  
 PF  
 XX 07-APR-2000; 2000DE-01019173.  
 PR  
 XX (EPIG-) EPIGENOMICS AG.  
 PA  
 XX Olek A, Piepenbrock C, Berlin K;  
 PI  
 XX WPI; 2001-657177/75.  
 DR  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 PT  
 XX Claim 1; SEQ ID NO 106599; 29pp + Sequence Listing; German.  
 PS  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

XX  
 SQ Sequence 13 BP; 6 A; 0 C; 4 G; 3 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 953 TGTATCGCTACCA 965  
 ||||| |||||  
 Db 13 TTTATCTTACCA 1

RESULT 1030  
 ID ABF06603  
 ABF06603 standard; DNA; 13 BP.  
 XX  
 AC ABF06603;  
 XX  
 XX 21-FEB-2002 (first entry)  
 DT  
 XX Oligonucleotide SEQ ID NO 106600 for detecting SNP TSC0026700.  
 DE  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 OS  
 XX WO200177384-A2.  
 PN  
 XX 18-OCT-2001.  
 PD



XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 106600; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX Sequence 13 BP; 3 A; 4 C; 0 G; 6 T; 0 U; 0 Other;  
 XX Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 953 TGTATCGCTACCA 965  
 DB 1 TTATCTCTACCA 13  
 RESULT 1031  
 ABC07407  
 ID ABC07407 standard; DNA; 13 BP.  
 AC ABC07407;  
 XX 20-FEB-2002 (first entry)  
 XX Oligonucleotide SEQ ID NO 7398 for detecting SNP TSC0002151.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

PT methylation status.  
 XX Claim 1; SEQ ID NO 7398; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX Sequence 13 BP; 2 A; 7 C; 0 G; 4 T; 0 U; 0 Other;  
 XX Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 931 TCCCTCTCTCTCA 943  
 DB 1 TCCCTCATCTCTCA 13  
 RESULT 1032  
 ABF08305/c  
 ID ABF08305 standard; DNA; 13 BP.  
 AC ABF08305;  
 XX 21-FEB-2002 (first entry)  
 XX Oligonucleotide SEQ ID NO 108302 for detecting SNP TSC0027114.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 108302; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence

data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 8 A; 1 C; 1 G; 3 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

941 TCATGCGTTTAAT 953  
 (|||||)  
 13 TTAATCGTTTAAT 1

SULT 1033

C84497

ABC84497 standard; DNA; 13 BP.

ABC84497;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 84514 for detecting SNP TSC0021261.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 84514; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 3 A; 2 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

941 TCATGCGTTTAAT 953  
 (|||||)  
 1 TCATCGTTTAAT 13

RESULT 1034

ABF33699/c

ID ABF33699 standard; DNA; 13 BP.

XX AC ABF33699;

XX DT 21-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 133696 for detecting SNP TSC0033329.

XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX OS Homo sapiens.

XX WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX PS Claim 1; SEQ ID NO 133696; 29pp + Sequence Listing; German.

XX CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX SQ Sequence 13 BP; 4 A; 3 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 947 GTTTAATGTAATCG 959

DB 13 GTTAAATGAATCG 1

RESULT 1035

ABF53570

ID ABF53570 standard; DNA; 13 BP.

XX AC ABF53570;

XX DT 21-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 153567 for detecting SNP TSC0038820.

XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 PN WO200177384-A2.  
 XX  
 PD 18-OCT-2001.  
 XX  
 PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 PR 07-APR-2000; 2000DE-01019173.  
 XX  
 PA (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 DR WPI; 2001-657177/75.  
 XX  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 PS Claim 1; SEQ ID NO 153567; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 940 TTCAATTGGTTAA 952  
 DB 1 TTTTGGTTAA 13  
 RESULT 1036  
 ABF79616  
 ID ABF79616 standard; DNA; 13 BP.  
 AC  
 AC ABF79616;  
 XX  
 DT 22-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide SEQ ID NO 179613 for detecting SNP TSC0044465.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200177384-A2.  
 XX  
 PD 18-OCT-2001.  
 XX  
 PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 PR 07-APR-2000; 2000DE-01019173.  
 XX  
 PA (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 DR WPI; 2001-657177/75.  
 XX  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 PS Claim 1; SEQ ID NO 179613; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic

PA (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 DR WPI; 2001-657177/75.  
 XX  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 PS Claim 1; SEQ ID NO 179613; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 1 A; 0 C; 2 G; 10 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 909 TTCTTTGGTCTT 921  
 DB 1 TTTATTGGTTT 13  
 RESULT 1037  
 ABF79617/C  
 ID ABF79617 standard; DNA; 13 BP.  
 XX  
 AC ABF79617;  
 XX  
 DT 22-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide SEQ ID NO 179614 for detecting SNP TSC0044465.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200177384-A2.  
 XX  
 PD 18-OCT-2001.  
 XX  
 PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 PR 07-APR-2000; 2000DE-01019173.  
 XX  
 PA (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 DR WPI; 2001-657177/75.  
 XX  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 PS Claim 1; SEQ ID NO 179614; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 10 A; 2 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
909 TTTCTTTGGTCTT 921  
13 TTTATTGGTTT 1

RESULT 1038

ABF82323/c  
ABF82323 standard; DNA; 13 BP.

ABF82323;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 182320 for detecting SNP TSC0045058.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 182320; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 940 TTCATTGGTTTAA 952  
DB 13 TTTATTGGTTTAA 1

RESULT 1039

ABH32577  
ID ABH32577 standard; DNA; 13 BP.

AC ABH32577;

DT 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 232554 for detecting SNP TSC0056713.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

PN WO200177384-A2.

PD 18-OCT-2001.

PF 06-APR-2001; 2001WO-IB0000713.

PR 07-APR-2000; 2000DE-01019173.

PA (EPIG-) EPIGENOMICS AG.

PI Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 232554; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 1 A; 6 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 924 CCTTTTATCCCTC 936  
DB 1 CCATTTTCCCTC 13

RESULT 1040

ABH34642/c  
ID ABH34642 standard; DNA; 13 BP.



Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 211665; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 6 A; 0 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
922 TGCCTTTTATCCC 934  
13 TCCCTTTTCTCCC 1

RESULT 1043

ABH1689

ABH11689 standard; DNA; 13 BP.

ABH11689;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 211666 for detecting SNP TSC0051615.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 211666; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

CC oligomers are also used for detecting cell type differentiation. ABC00010-ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

CC Sequence 13 BP; 0 A; 7 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 922 TGCCTTTTATCCC 934

Db 1 TCCCTTTTCTCCC 13

RESULT 1044

ABF87622

ID ABF87622 standard; DNA; 13 BP.

AC ABF87622;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 187619 for detecting SNP TSC0007370.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB0000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX Claim 1; SEQ ID NO 187619; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 3 A; 1 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

QY 940 TTCAATGGTTTAA 952
  ||| ||| ||| ||| |||
Db 1 TTCAATGGTTTAA 13

RESULT 1045
ABF91290/c
ID ABF91290 standard; DNA; 13 BP.
AC ABF91290;
CT 22-FEB-2002 (first entry)
DE Oligonucleotide SEQ ID NO 191287 for detecting SNP TSC0047057.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 191287; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 8 A; 0 C; 4 G; 1 T; 0 U; 0 Other;
XX
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.le+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 922 TGCTTTTATCCC 934
  ||| ||| ||| ||| |||
Db 13 TTCTTTTATCCC 1

RESULT 1046
ABH45584/c
ID ABH45584 standard; DNA; 13 BP.
XX ABH45584;
AC ABH45584;
CT 22-FEB-2002 (first entry)
DE Oligonucleotide SEQ ID NO 264161 for detecting SNP TSC0064009.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.

```

```

DE Oligonucleotide SEQ ID NO 245561 for detecting SNP TSC0059959.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 245561; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 5 A; 0 C; 5 G; 3 T; 0 U; 0 Other;
XX
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.le+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 933 CCTCCTCTTCATT 945
  ||| ||| ||| ||| |||
Db 13 CCTACTCTACATT 1

RESULT 1047
ABH64184
ID ABH64184 standard; DNA; 13 BP.
XX ABH64184;
AC ABH64184;
CT 22-FEB-2002 (first entry)
DE Oligonucleotide SEQ ID NO 264161 for detecting SNP TSC0064009.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.

```

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 264161; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

940 TTCATTGGTTTAA 952

1 TTGATTGGTTGTA 13

SULT 1048

ABC69698 standard; DNA; 13 BP.

ABC69698;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 69715 for detecting SNP TSC0018143.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal, respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

PS Claim 1; SEQ ID NO 69715; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 7 A; 0 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 927 TTTATCCCTCCTC 939

DB 13 TTTCTCTCCTCCTC 1

RESULT 1049

ABC20174/C  
ID ABC20174 standard; DNA; 13 BP.

XX

AC ABC20174;

DT 20-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 20191 for detecting SNP TSC0004139.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal, respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB0000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

PS Claim 1; SEQ ID NO 20191; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at



```
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 7 A; 0 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGGTTTAAT 953
Db 13 TCATTCAATTAAT 1

RESULT 1050
ABC25844
ID ABC25844 standard; DNA; 13 BP.
XX
AC ABC25844;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 25861 for detecting SNP TSC0006595.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 25861; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGGTTTAA 952
Db 1 TTTATTAGTTTAA 13

RESULT 1052
ABC33272
ID ABC33272 standard; DNA; 13 BP.
XX
AC ABC33272;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 33289 for detecting SNP TSC0010604.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
```

```
RESULT 1051
ABC80739/C
ID ABC80739 standard; DNA; 13 BP.
XX
AC ABC80739;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 80756 for detecting SNP TSC0020458.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 80756; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 8 A; 3 C; 1 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 947 GTTTAATGTTTCG 959
Db 13 GTTTATTGTTTCG 1

RESULT 1052
ABC33272
ID ABC33272 standard; DNA; 13 BP.
XX
AC ABC33272;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 33289 for detecting SNP TSC0010604.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
```

```

Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 33289; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
940 TTCATTGGTTTAA 952
1 TTGATTGATTAA 13
|||||
|
RESULT 1053
ABF14859/c
ABF14859 standard; DNA; 13 BP.
ABF14859;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 114856 for detecting SNP TSC0028764.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 114856; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
905 TCATTTCTTTGG 917
13 TAAATTTTGG 1
|||||
|
RESULT 1054
ABC66550/c
ABC66550 standard; DNA; 13 BP.
ABC66550;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 66567 for detecting SNP TSC0017484.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 66567; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The

```

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABH99989 and ABH00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 CC  
 SQ Sequence 13 BP; 4 A; 1 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

CY 953 TGATCGCTACCA 965  
 DB 13 TTAAACGCTACCA 1

RESULT 1055  
 ABF39997/C  
 ID ABF39997 standard; DNA; 13 BP.

XX AC ABF39997;

XX DT 21-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 139994 for detecting SNP TSC0035065.

XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX PN WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX XX (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX DR WPI; 2001-657177/75.

XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

XX PS Claim 1; SEQ ID NO 139994; 29pp + Sequence Listing; German.

XX CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABH99989, ABH00010-ABH99989 and ABH00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 CC

SQ Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 941 TCATTGCTTTAAT 953  
 DB 13 TGATTGCTTTAAT 1

RESULT 1056

ABF39998  
 ID ABF39998 standard; DNA; 13 BP.

XX AC ABF39998;

XX DT 21-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 139995 for detecting SNP TSC0035065.

XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX PN WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX DR WPI; 2001-657177/75.

XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

XX PS Claim 1; SEQ ID NO 139995; 29pp + Sequence Listing; German.

XX CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABH99989, ABH00010-ABH99989 and ABH00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 CC

SQ Sequence 13 BP; 3 A; 1 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 941 TCATTGCTTTAAT 953  
 DB 1 TGATTGCTTTAAT 13

RESULT 1057

ABF93487  
 ID ABF93487 standard; DNA; 13 BP.

XX AC ABF93487;



PT designed to detect single-nucleotide polymorphisms and cytosine  
 TT methylation status.

XX Claim 1; SEQ ID NO 228564; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 9 A; 1 C; 0 G; 3 T; 0 U; 0 Other;

XX Query Match 13.4%; Score 9.8; DB 1; Length 13;

XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;

XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

CV 944 TTGGTTTAATGTA 956

CV 13 TTGTTTAATTTA 1

RESULT 1060

ID ABF81886  
 XX ABF81886 standard; DNA; 13 BP.

XX AC ABF81886;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 181883 for detecting SNP TSC0044958.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 XX designed to detect single-nucleotide polymorphisms and cytosine  
 XX methylation status.

XX Claim 1; SEQ ID NO 181883; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073

CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 0 A; 0 C; 2 G; 11 T; 0 U; 0 Other;

XX Query Match 13.4%; Score 9.8; DB 1; Length 13;

XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;

XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 908 TTTTCTTGGTCT 920

Db 1 TTTTCTTGGTCT 13

RESULT 1061

ID ABF61608/c  
 XX ABF61608 standard; DNA; 13 BP.

XX AC ABF61608;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 161605 for detecting SNP TSC0008770.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 XX designed to detect single-nucleotide polymorphisms and cytosine  
 XX methylation status.

XX Claim 1; SEQ ID NO 161605; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 8 A; 0 C; 4 G; 1 T; 0 U; 0 Other;

XX Query Match 13.4%; Score 9.8; DB 1; Length 13;

XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;

XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 900 CCTGGTCAATTTTC 912

CV 1111111111111111



```

XX (EPIG-) EPIGENOMICS AG.
XX
XX FI Olek A, Piepenbrock C, Berlin K;
XX
XX DR WPI; 2001-657177/75.
XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX
XX PS Claim 1; SEQ ID NO 246398; 29pp + Sequence Listing; German.
XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 4 A; 2 C; 0 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 950 TAATGATATCGCTA 962
XX Db 1 TAATTATCTCTA 13
XX
XX RESULT 1065
XX ABH58472/C
XX ID ABH58472 standard; DNA; 13 BP.
XX
XX AC ABH58472;
XX
XX XX 22-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 258449 for detecting SNP TSC0062845.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX CS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.
XX
XX FI Olek A, Piepenbrock C, Berlin K;
XX
XX DR WPI; 2001-657177/75.
XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX
XX PS Claim 1; SEQ ID NO 258449; 29pp + Sequence Listing; German.
XX

```

```

CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 8 A; 0 C; 2 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 919 CTTTGCCTTTTAT 931
XX Db 13 CTTTAACCTTTTAT 1
XX
XX RESULT 1066
XX ABC18720
XX ID ABC18720 standard; DNA; 13 BP.
XX
XX AC ABC18720;
XX
XX XX 20-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 18727 for detecting SNP TSC0003943.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX CS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.
XX
XX FI Olek A, Piepenbrock C, Berlin K;
XX
XX DR WPI; 2001-657177/75.
XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX
XX PS Claim 1; SEQ ID NO 18727; 29pp + Sequence Listing; German.
XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX

```

1	Sequence 13 BP; 1 A; 0 C; 2 G; 10 T; 0 U; 0 Other;	
Query Match	13.4%; Score 9.8; DB 1; Length 13;	
Best Local Similarity	84.6%; Pred. No. 1.1e+03;	
Matches 11; Conservative	0; Mismatches 2; Indels 0; Gaps 0;	
909	TTTCTTTGGTCTT 921	
1	TTTTTTGGTATT 13	
RESULT 1067		
ABC99122		
ABC99122 standard; DNA; 13 BP.		
ABC99122;		
21-FEB-2002 (first entry)		
Oligonucleotide SEQ ID NO 99139 for detecting SNP TSC0024618.		
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;		
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;		
central nervous system; gastrointestinal; respiratory; immune; metabolic.		
Homo sapiens.		
WO200177384-A2.		
18-OCT-2001.		
06-APR-2001; 2001WO-IB000713.		
07-APR-2000; 2000DE-01019173.		
(EPIG-) EPIGENOMICS AG.		
Olek A, Piepenbrock C, Berlin K;		
WPI; 2001-657177/75.		
Set of oligonucleotides, useful for diagnosis and cell typing, is		
designed to detect single-nucleotide polymorphisms and cytosine		
methylation status.		
Claim 1; SEQ ID NO 99139; 29pp + Sequence Listing; German.		
This invention describes novel oligonucleotide primers or peptide nucleic		
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)		
and cytosine methylation status in chemically pretreated genomic DNA. The		
oligonucleotides are used for diagnosis and/or prognosis of cancer and a		
range of diseases including immune system, gastrointestinal, respiratory,		
central nervous system, cardiovascular and metabolic disorders. The		
oligonucleotides are also used for detecting cell type differentiation. ABC00010		
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073		
represent the oligomers described in the invention. NOTE: The sequence		
data for this patent did not form part of the printed specification, but		
was obtained in electronic format from WIPO at		
ftp.wipo.int/pub/published_pct_sequences		
Sequence 13 BP; 1 A; 0 C; 2 G; 10 T; 0 U; 0 Other;		
Query Match	13.4%; Score 9.8; DB 1; Length 13;	
Best Local Similarity	84.6%; Pred. No. 1.1e+03;	
Matches 11; Conservative	0; Mismatches 2; Indels 0; Gaps 0;	
902	TGGTCATTTTCTT 914	
1	TGGTATTTTTTT 13	
RESULT 1068		
ABC02478		
ABC02478 standard; DNA; 13 BP.		
ABC02478;		
20-FEB-2002 (first entry)		
Oligonucleotide SEQ ID NO 2469 for detecting SNP TSC0000994.		
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;		
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;		
central nervous system; gastrointestinal; respiratory; immune; metabolic.		
Homo sapiens.		
WO200177384-A2.		
18-OCT-2001.		
06-APR-2001; 2001WO-IB000713.		
07-APR-2000; 2000DE-01019173.		
(EPIG-) EPIGENOMICS AG.		
Olek A, Piepenbrock C, Berlin K;		
WPI; 2001-657177/75.		
Set of oligonucleotides, useful for diagnosis and cell typing, is		
designed to detect single-nucleotide polymorphisms and cytosine		
methylation status.		
Claim 1; SEQ ID NO 2469; 29pp + Sequence Listing; German.		
This invention describes novel oligonucleotide primers or peptide nucleic		
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)		
and cytosine methylation status in chemically pretreated genomic DNA. The		
oligonucleotides are used for diagnosis and/or prognosis of cancer and a		
range of diseases including immune system, gastrointestinal, respiratory,		
central nervous system, cardiovascular and metabolic disorders. The		
oligonucleotides are also used for detecting cell type differentiation. ABC00010		
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073		
represent the oligomers described in the invention. NOTE: The sequence		
data for this patent did not form part of the printed specification, but		
was obtained in electronic format from WIPO at		
ftp.wipo.int/pub/published_pct_sequences		
Sequence 13 BP; 1 A; 0 C; 2 G; 10 T; 0 U; 0 Other;		
Query Match	13.4%; Score 9.8; DB 1; Length 13;	
Best Local Similarity	84.6%; Pred. No. 1.1e+03;	
Matches 11; Conservative	0; Mismatches 2; Indels 0; Gaps 0;	
902	TGGTCATTTTCTT 914	
1	TGGTATTTTTTT 13	
RESULT 1069		
ABC80738		
ABC80738 standard; DNA; 13 BP.		
ABC80738;		
21-FEB-2002 (first entry)		
Oligonucleotide SEQ ID NO 80755 for detecting SNP TSC0020458.		
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;		
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;		
central nervous system; gastrointestinal; respiratory; immune; metabolic.		
Homo sapiens.		





central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 3 A; 0 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

931 TCCCTCTCTCTCA 943  
|||||  
13 TCCCTCTCTCTCA 1

RESULT 1072  
ABC3595/c  
ABC3595 standard; DNA; 13 BP.  
ABC3595;

20-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 35612 for detecting SNP TSC0011256.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 35612; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 7 A; 4 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGGTTTAATGTA 956  
|||||  
Db 13 TTGGTTGATTGTA 1

RESULT 1073

ABC63986/c  
ID ABC63986 standard; DNA; 13 BP.

XX AC ABC63986;

XX DT 21-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 64003 for detecting SNP TSC0016893.

XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX PN WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB0000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX DR WPI; 2001-657177/75.

XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX PS Claim 1; SEQ ID NO 64003; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX SQ Sequence 13 BP; 5 A; 0 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 932 CCCTCTCTCTCAT 944  
|||||  
Db 13 CCCTCTCTCAT 1

RESULT 1074

ABF33698  
ID ABF33698 standard; DNA; 13 BP.

XX AC ABF33698;

XX DT 21-FEB-2002 (first entry)



Claim 1; SEQ ID NO 197568; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 9 A; 1 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

945 TGGTTTAATGTAT 957

|||||  
13 TGGTTTAATGTAT 1

RESULT 1077

BF99128

ABF99128 standard; DNA; 13 BP.

ABF99128;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 199125 for detecting SNP TSC0049008.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 199125; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but

CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences

SQ Sequence 13 BP; 1 A; 0 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 905 TCATTTTCTTTGG 917

|||||  
Db 1 TCATTTTCTTTGG 13

RESULT 1078

ABH00288

ID ABH00288 standard; DNA; 13 BP.

XX AC ABH00288;

DT 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 200265 for detecting SNP TSC0049282.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 200265; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

SQ Sequence 13 BP; 3 A; 0 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGGTTTAATGTA 956

|||||  
Db 1 TTGGTTTAATGTA 13

```

RESULT 1079
ABF78482
ID ABF78482 standard; DNA; 13 BP.
XX
XX AC ABF78482;
XX
XX UT 22-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 178479 for detecting SNP TSC0044196.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX FF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.
XX
XX FI Olek A, Piepenbrock C, Berlin K;
XX
XX FR WPI; 2001-657177/75.
XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX PS Claim 1; SEQ ID NO 178479; 29pp + Sequence Listing; German.
XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;
XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 945 TCGTTTATGTAT 957
DB 1 TTGTTTATGTAT 13

RESULT 1080
ABH07556
ID ABH07556 standard; DNA; 13 BP.
XX
XX AC ABH07556;
XX
XX XX 22-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 207533 for detecting SNP TSC0004679.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX FF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.

```

```

KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.
XX
XX FI Olek A, Piepenbrock C, Berlin K;
XX
XX FR WPI; 2001-657177/75.
XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX PS Claim 1; SEQ ID NO 207533; 29pp + Sequence Listing; German.
XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 2 A; 0 C; 3 G; 8 T; 0 U; 0 Other;
XX
XX CC Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGTTTATGTAT 956
DB 1 TTGTTTATGTAT 13

RESULT 1081
ABF58739
ID ABF58739 standard; DNA; 13 BP.
XX
XX AC ABF58739;
XX
XX DT 21-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 158736 for detecting SNP TSC0039945.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.

```

X I Olek A, Piepenbrock C, Berlin K;  
X R WPI; 2001-657177/75.  
X T Set of oligonucleotides, useful for diagnosis and cell typing, is  
T I designed to detect single-nucleotide polymorphisms and cytosine  
T I methylation status.  
X S Claim 1; SEQ ID NO 158736; 29pp + Sequence Listing; German.  
X C This invention describes novel oligonucleotide primers or peptide nucleic  
C acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
C and cytosine methylation status in chemically pretreated genomic DNA. The  
C oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
C range of diseases including immune system, gastrointestinal, respiratory,  
C central nervous system, cardiovascular and metabolic disorders. The  
C oligomers are also used for detecting cell type differentiation. ABC00010  
C -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
C represent the oligomers described in the invention. NOTE: The sequence  
C data for this patent did not form part of the printed specification, but  
C was obtained in electronic format from WIPO at  
C ftp.wipo.int/pub/published\_pct\_sequences  
X X  
X S Sequence 13 BP; 3 A; 3 C; 1 G; 6 T; 0 U; 0 Other;  
C Query Match 13.4%; Score 9.8; DB 1; Length 13;  
C Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
C Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Y 941 TCATTGGTTTAAT 953  
C 1 TCATTGGTTCAAT 13  
350102  
3534643  
C ABH34643 standard; DNA; 13 BP.  
X ABH34643;  
C 22-FEB-2002 (first entry)  
X Oligonucleotide SEQ ID NO 234620 for detecting SNP TSC0057256.  
X SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
X peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
X central nervous system; gastrointestinal; respiratory; immune; metabolic.  
X Homo sapiens.  
X WO200177384-A2.  
X 18-OCT-2001.  
X 06-APR-2001; 2001WO-IB0000713.  
X 07-APR-2000; 2000DE-01019173.  
X (EPIG-) EPIGENOMICS AG.  
X Olek A, Piepenbrock C, Berlin K;  
X WPI; 2001-657177/75.  
X Set of oligonucleotides, useful for diagnosis and cell typing, is  
X designed to detect single-nucleotide polymorphisms and cytosine  
X methylation status.  
X Claim 1; SEQ ID NO 234620; 29pp + Sequence Listing; German.  
X This invention describes novel oligonucleotide primers or peptide nucleic  
X acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
X S Sequence 13 BP; 2 A; 3 C; 0 G; 8 T; 0 U; 0 Other;  
C Query Match 13.4%; Score 9.8; DB 1; Length 13;  
C Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
C Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Y 918 TCATTGGTTTAA 930  
C 1 TCATTGGTTTAA 13  
RESULT 1083  
ABH14405  
ID ABH14405 standard; DNA; 13 BP.  
XX AC ABH14405;  
XX 22-FEB-2002 (first entry)  
XX Oligonucleotide SEQ ID NO 214382 for detecting SNP TSC0052150.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB0000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX Claim 1; SEQ ID NO 214382; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences  
XX  
X S Sequence 13 BP; 1 A; 5 C; 1 G; 6 T; 0 U; 0 Other;



18-OCT-2001.  
06-APR-2001; 2001WO-IB0000713.  
07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.  
Claim 1; SEQ ID NO 84066; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABT00010-ABT82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences  
Sequence 13 BP; 10 A; 3 C; 0 G; 0 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
909 TTTCTTTGGTCTT 921  
13 TTGTTTGGTTT 1  
RESULT 1087  
3C35594  
ABC35594 standard; DNA; 13 BP.  
ABC35594;  
20-FEB-2002 (first entry)  
Oligonucleotide SEQ ID NO 35611 for detecting SNP TSC0011256.  
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.  
Homo sapiens.  
WO200177384-A2.  
18-OCT-2001.  
06-APR-2001; 2001WO-IB0000713.  
07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.

PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX Claim 1; SEQ ID NO 35611; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABT00010-ABT82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 2 A; 0 C; 4 G; 7 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 944 TTGGTTTATGTA 956  
DB 1 TTGGTTGATTGA 13  
RESULT 1088  
ABC14809/c  
ID ABC14809 standard; DNA; 13 BP.  
XX ABC14809;  
XX  
XX 20-FEB-2002 (first entry)  
XX Oligonucleotide SEQ ID NO 14816 for detecting SNP TSC0003331.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB0000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX Claim 1; SEQ ID NO 14816; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABT00010-ABT82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX



CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 9 A; 1 C; 0 G; 3 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 CY 941 TCATTGGTTTAAT 953  
 Db 13 TTATTGTTTAAT 1  
 RESULT 1089  
 ABC40099  
 ID ABC40099 standard; DNA; 13 BP.  
 AC ABC40099;  
 XX  
 DT 21-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide SEQ ID NO 40116 for detecting SNP TSC0012202.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 EN WO200177384-A2.  
 XX  
 PD 18-OCT-2001.  
 XX  
 PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 PR 07-APR-2000; 2000DE-01019173.  
 XX  
 PA (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 DR WPI; 2001-657177/75.  
 XX  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 PS Claim 1; SEQ ID NO 40116; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 1 A; 3 C; 0 G; 9 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 918 TCATTGCTTTTA 930

Db 1 TCATTGCTTTTA 13  
 RESULT 1090  
 ABC91401/C  
 ID ABC91401 standard; DNA; 13 BP.  
 XX  
 AC ABC91401;  
 XX  
 DT 21-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide SEQ ID NO 91418 for detecting SNP TSC0022889.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 EN WO200177384-A2.  
 XX  
 PD 18-OCT-2001.  
 XX  
 PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 PR 07-APR-2000; 2000DE-01019173.  
 XX  
 PA (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 DR WPI; 2001-657177/75.  
 XX  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 PS Claim 1; SEQ ID NO 91418; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 908 TTTTCTTTGGTCT 920  
 Db 13 TTTTATTGGTAT 1  
 RESULT 1091  
 ABC91478  
 ID ABC91478 standard; DNA; 13 BP.  
 XX  
 AC ABC91478;  
 XX  
 DT 21-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide SEQ ID NO 91495 for detecting SNP TSC0022909.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

Claim 1; SEQ ID NO 91495; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

903 GGTCAATTTCTTT 915

1 GGTAAATTTT 13

SULT 1092

F19925

ABF19925 standard; DNA; 13 BP.

ABF19925;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 119922 for detecting SNP TSC0029932.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

Claim 1; SEQ ID NO 119922; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 0 A; 5 C; 0 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 927 TTTATCTCTCTC 939

1 TTTTCTCTCTC 13

RESULT 1093

ABF33000/c

ID ABF33000 standard; DNA; 13 BP.

ABF33000;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 132997 for detecting SNP TSC0033182.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

Claim 1; SEQ ID NO 132997; 29pp + Sequence Listing; German.

XX CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

SQ Sequence 13 BP; 5 A; 0 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 931 TCCCTCCTCTTCA 943  
DB 13 TCCCTCATATTCA 1  
|||||

RESULT 1094  
ABF34215  
ID ABF34215 standard; DNA; 13 BP.  
XX AC  
XX AC  
XX ABF34215;  
XX 21-FEB-2002 (first entry)  
XX DE Oligonucleotide SEQ ID NO 134212 for detecting SNP TSC0033456.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
XX Claim 1; SEQ ID NO 134212; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX SQ Sequence 13 BP; 2 A; 3 C; 0 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 921 TTGGCTTTTATCC 933  
DB 1 TTATCTTTTATCC 13  
|||||

RESULT 1095  
ABF40195  
ID ABF40195 standard; DNA; 13 BP.  
XX AC  
XX AC  
XX ABF40195;  
XX 21-FEB-2002 (first entry)  
XX DE Oligonucleotide SEQ ID NO 140192 for detecting SNP TSC0035122.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
XX Claim 1; SEQ ID NO 140192; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

SQ Sequence 13 BP; 1 A; 2 C; 0 G; 10 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 919 CTTTGCTTTTAT 931  
DB 1 CTTTTCCTTTAT 13  
|||||

RESULT 1096

```

F44005/C
ABF44005 standard; DNA; 13 BP.
ABF44005;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 144002 for detecting SNP TSC0036164.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 144002; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 10 A; 3 C; 0 G; 0 T; 0 U; 0 Other;
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 10 A; 3 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
908 TTTTCTTTGGTCT 920
|||||
13 TTTTCTTTGGTCT 1
RESULT 1097
BF99935/C
ABF99935 standard; DNA; 13 BP.
ABF99935;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 199932 for detecting SNP TSC0049190.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 199932; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 6 A; 4 C; 0 G; 3 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
947 GTTAAATGATCG 959
|||||
13 GTTAAATGATAG 1
RESULT 1098
ABF51814
ID ABF51814 standard; DNA; 13 BP.
XX
AC ABF51814;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 151811 for detecting SNP TSC0038352.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;

```



```

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

      949 TTAATGTCGCT 961
      ||| |||||
      1 TTACTATCGCT 13

RESULT 1101
ABF57606
  ABF57606 standard; DNA; 13 BP.
  ABF57606;
  21-FEB-2002 (first entry)
  Oligonucleotide SEQ ID NO 157603 for detecting SNP TSC0039698.
  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
  peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
  central nervous system; gastrointestinal; respiratory; immune; metabolic.
  Homo sapiens.
  WO200177384-A2.
  18-OCT-2001.
  06-APR-2001; 2001WO-IB000713.
  07-APR-2000; 2000DE-01019173.
  (EPIG-) EPIGENOMICS AG.
  Olek A, Piepenbrock C, Berlin K;
  WPI; 2001-657177/75.
  Set of oligonucleotides, useful for diagnosis and cell typing, is
  designed to detect single-nucleotide polymorphisms and cytosine
  methylation status.
  Claim 1; SEQ ID NO 157603; 29pp + Sequence Listing; German.
  This invention describes novel oligonucleotide primers or peptide nucleic
  acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
  and cytosine methylation status in chemically pretreated genomic DNA. The
  oligonucleotides are used for diagnosis and/or prognosis of cancer and a
  range of diseases including immune system, gastrointestinal, respiratory,
  central nervous system, cardiovascular and metabolic disorders. The
  oligomers are also used for detecting cell type differentiation. ABC00010
  -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
  represent the oligomers described in the invention. NOTE: The sequence
  data for this patent did not form part of the printed specification, but
  was obtained in electronic format from WIPO at
  ftp.wipo.int/pub/published_pct_sequences

  Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

      943 ATTGGTTTAATGT 955
      ||| |||||
      1 ATTGGGTAAATTT 13

RESULT 1102
ABH10419/C
  ABH10419 standard; DNA; 13 BP.
  ABH10419;
  22-FEB-2002 (first entry)
  Oligonucleotide SEQ ID NO 211889 for detecting SNP TSC0051655.
  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
  peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
  central nervous system; gastrointestinal; respiratory; immune; metabolic.
  Homo sapiens.
  WO200177384-A2.
  18-OCT-2001.

```

```

DT 22-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 210396 for detecting SNP TSC0051377.
DE
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 210396; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 7 A; 1 C; 0 G; 5 T; 0 U; 0 Other;
SQ
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGGTTTAAT 953
DB 13 TAAATTAGTTAAT 1

RESULT 1103
ABH11912/C
  ID ABH11912 standard; DNA; 13 BP.
  AC ABH11912;
  XX
  XX 22-FEB-2002 (first entry)
  XX Oligonucleotide SEQ ID NO 211889 for detecting SNP TSC0051655.
  XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
  XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
  XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
  XX Homo sapiens.
  XX WO200177384-A2.
  XX 18-OCT-2001.

```

XX PF 06-APR-2001; 2001WO-IB000713.  
XX PR 07-APR-2000; 2000DE-01019173.  
XX PA (EPIG-) EPIGENOMICS AG.  
XX PI Olek A, Piepenbrock C, Berlin K;  
XX DR WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX Claim 1; SEQ ID NO 211889; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 9 A; 0 C; 2 G; 2 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 918 TCTTTCCTTTTA 930  
Do 13 TATTTCTTTTA 1  
RESULT 1104  
ABH37512  
ID ABH37512 standard; DNA; 13 BP.  
AC ABH37512;  
XX 22-FEB-2002 (first entry)  
XX Oligonucleotide SEQ ID NO 237489 for detecting SNP TSC0057923.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
OS  
XX WO200177384-A2.  
PN  
XX 18-OCT-2001.  
PD  
XX 06-APR-2001; 2001WO-IB000713.  
PF  
XX 07-APR-2000; 2000DE-01019173.  
PR  
XX (EPIG-) EPIGENOMICS AG.  
PA  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.

PT methylation status.  
XX Claim 1; SEQ ID NO 237489; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 5 A; 0 C; 2 G; 6 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 950 TAAATGATACGCTA 962  
Db 1 TAAATGATACGCTA 13  
RESULT 1105  
ABF87620  
ID ABF87620 standard; DNA; 13 BP.  
AC ABF87620;  
XX 22-FEB-2002 (first entry)  
XX Oligonucleotide SEQ ID NO 187617 for detecting SNP TSC0007370.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
OS  
XX WO200177384-A2.  
PN  
XX 18-OCT-2001.  
PD  
XX 06-APR-2001; 2001WO-IB000713.  
PF  
XX 07-APR-2000; 2000DE-01019173.  
PR  
XX (EPIG-) EPIGENOMICS AG.  
PA  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX Claim 1; SEQ ID NO 187617; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence

data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

940 TTCATTGGTTAA 952

|||||  
1 TTCATTGGTTAA 13

RESULT 1106

ABC17546

ABC17546 standard; DNA; 13 BP.

ABC17546;

20-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 17553 for detecting SNP TSC0003772.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 17553; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 0 A; 1 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

917 GTCCTTGGCTTTT 929

|||||  
1 GTCCTTGGCTTTT 13

RESULT 1107

ABC17547/C

ID ABC17547 standard; DNA; 13 BP.

XX ABC17547;

AC ABC17547;

DT 20-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 17554 for detecting SNP TSC0003772.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 17554; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 8 A; 4 C; 1 G; 0 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

917 GTCCTTGGCTTTT 929

|||||  
13 GTCCTTGGCTTTT 1

RESULT 1108

ABC44352

ID ABC44352 standard; DNA; 13 BP.

XX ABC44352;

AC ABC44352;

DT 21-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 44369 for detecting SNP TSC0013028.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;



KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
CS Homo sapiens.  
XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX Claim 1; SEQ ID NO 44369; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 2 A; 0 C; 4 G; 7 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 945 TGGTTTAAATGAT 957  
Db 1 TGGTGTATTGTAAT 13  
RESULT 1109  
ABC96140  
ID ABC96140 standard; DNA; 13 BP.  
XX ABC96140;  
XX 21-FEB-2002 (first entry)  
XX Oligonucleotide SEQ ID NO 96157 for detecting SNP TSC0023904.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX

PA (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX Claim 1; SEQ ID NO 96157; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 5 A; 0 C; 2 G; 6 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 941 TCATGTGTTTAAT 953  
Db 1 TAAATGGTTTAAT 13  
RESULT 1110  
ABC75663  
ID ABC75663 standard; DNA; 13 BP.  
XX ABC75663;  
XX 21-FEB-2002 (first entry)  
XX Oligonucleotide SEQ ID NO 75680 for detecting SNP TSC0019401.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX Claim 1; SEQ ID NO 75680; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 2 A; 7 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

931 TCCCTCCTCTTCA 943

1 TCCATCCTCTTCA 13

RESULT 1111

ABC25845/C  
ABC25845 standard; DNA; 13 BP.

ABC25845;

20-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 25862 for detecting SNP TSC0006595.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 25862; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 8 A; 1 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGGTTTAA 952

13 TTTATTAGTTTAA 1

RESULT 1112

ABF00945  
ID ABF00945 standard; DNA; 13 BP.

ABF00945;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 100942 for detecting SNP TSC0025123.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 100942; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 0 A; 9 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 932 CCCTCCTCTTCAT 944

1 CCCTCCCTTCCT 13

RESULT 1113

ABC02477/C  
ID ABC02477 standard; DNA; 13 BP.



Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 7399; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABT00010-ABT82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 5 A; 0 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

931 TCCCTCTCTTCA 943

|||||  
13 TCCCTCTCTTCA 1

RESULT 1116

ABC6245/C

ABC65245 standard; DNA; 13 BP.

ABC65245;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 65262 for detecting SNP TSC0017182.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 65262; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

CC oligomers are also used for detecting cell type differentiation. ABC00010-ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABT00010-ABT82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 9 A; 4 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 911 TCTTTGGTCTTG 923

|||||  
13 TCTTTGGTCTTG 1

RESULT 1117

ABC66886

ID ABC66886 standard; DNA; 13 BP.

AC ABC66886;

XX 21-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 66903 for detecting SNP TSC0017534.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 66903; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABT00010-ABT82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTATTGTTTAA 952  
 DB 1 TTTATTGTTTAA 13

RESULT 1118  
 ABF20842  
 ID ABF20842 standard; DNA; 13 BP.  
 XX  
 AC ABF20842;  
 XX  
 DT 21-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide SEQ ID NO 120839 for detecting SNP TSC0030156.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200177384-A2.  
 XX  
 DT 18-OCT-2001.  
 XX  
 DE 06-APR-2001; 2001WO-IB000713.  
 XX  
 KW (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 DR WPI; 2001-657177/75.  
 XX  
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 ES Claim 1; SEQ ID NO 120839; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 3 A; 0 C; 1 G; 9 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 945 TGGTTTAAATGTAT 957  
 DB 1 TTGTTTAAATTTAT 13

RESULT 1119  
 ABF93484/c  
 ID ABF93484 standard; DNA; 13 BP.  
 XX  
 AC ABF93484;  
 XX  
 DT 22-FEB-2002 (first entry)  
 XX

DE Oligonucleotide SEQ ID NO 193481 for detecting SNP TSC0047598.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200177384-A2.  
 XX  
 DT 18-OCT-2001.  
 XX  
 DE 06-APR-2001; 2001WO-IB000713.  
 XX  
 KW (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 DR WPI; 2001-657177/75.  
 XX  
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 ES Claim 1; SEQ ID NO 193481; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 6 A; 0 C; 5 G; 2 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 931 TCCTCTCTCTTCA 943  
 DB 13 TCCTCTCTCTTCA 1

RESULT 1120  
 ABF93485  
 ID ABF93485 standard; DNA; 13 BP.  
 XX  
 AC ABF93485;  
 XX  
 DT 22-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide SEQ ID NO 193482 for detecting SNP TSC0047598.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200177384-A2.  
 XX  
 DT 18-OCT-2001.  
 XX  
 DE 06-APR-2001; 2001WO-IB000713.  
 XX

```
PS 07-APR-2000; 2000DE-01019173.
XX (EPiG-) EPIGENOMICS AG.
CC Olek A, Piepenbrock C, Berlin K;
CC WPI; 2001-657177/75.
CC Set of oligonucleotides, useful for diagnosis and cell typing, is
CC designed to detect single-nucleotide polymorphisms and cytosine
CC methylation status.
CC Claim 1; SEQ ID NO 193482; 29pp + Sequence Listing; German.
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 5 C; 0 G; 6 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 931 TCCTCTCTCTTCA 943
DB 1 TCCTCTCTCTTCA 13
RESULT 1121
ABH21755
ABH21755 standard; DNA; 13 BP.
ABH21755;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 221732 for detecting SNP TSC0053965.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPiG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 148104; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 924 CCTTTTATCCCTC 936
DB 1 CCTTTTATCCCTC 13
RESULT 1122
ABF48107/c
ABF48107 standard; DNA; 13 BP.
ABF48107;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 148104 for detecting SNP TSC0037394.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPiG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 148104; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
```

```

CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 3 C; 1 G; 3 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

CY 944 TTGGTTTAATGTA 956
Db 13 TTGGTTTAATGGA 1

RESULT 1123
ABF99934
ID ABF99934 standard; DNA; 13 BP.
XX
AC ABF99934;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 199931 for detecting SNP TSC0049190.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
XX
Claim 1; SEQ ID NO 199931; 29pp + Sequence Listing; German.
XX
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

CY 947 GTTAAATGATCG 959
Db 1 GTTAAATGATAG 13

RESULT 1125
ABH32576/c
ID ABH32576 standard; DNA; 13 BP.
XX
AC ABH32576;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 232553 for detecting SNP TSC0056713.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

```

```

RESULT 1124
ABF77448/c
ID ABF77448 standard; DNA; 13 BP.
XX
AC ABF77448;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 177445 for detecting SNP TSC0010778.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
XX
Claim 1; SEQ ID NO 177445; 29pp + Sequence Listing; German.
XX
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 7 A; 0 C; 5 G; 1 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

CY 931 TCCTCTCTCTTCA 943
Db 13 TCCTCTCTCTTTA 1

RESULT 1125
ABH32576/c
ID ABH32576 standard; DNA; 13 BP.
XX
AC ABH32576;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 232553 for detecting SNP TSC0056713.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

```

Homo sapiens.  
WO200177384-A2.  
18-OCT-2001.  
06-APR-2001; 2001WO-IB000713.  
07-APR-2000; 2000DE-01019173.  
(EPIC-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
Claim 1; SEQ ID NO 232553; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABG9989, ABF0010-ABF9989, ABH0010-ABH9989 and AB10010-AB182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
Sequence 13 BP; 6 A; 0 C; 6 G; 1 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
924 CCTTTTATCCCTC 936  
13 CCATTTTCCCTC 1  
RESULT 1126  
3F57607/C  
ABF57607 standard; DNA; 13 BP.  
ABF57607;  
21-FEB-2002 (first entry)  
Oligonucleotide SEQ ID NO 157604 for detecting SNP TSC0039698.  
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.  
Homo sapiens.  
WO200177384-A2.  
18-OCT-2001.  
06-APR-2001; 2001WO-IB000713.  
07-APR-2000; 2000DE-01019173.  
(EPIC-) EPIGENOMICS AG.

PI Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX Claim 1; SEQ ID NO 157604; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABG9989, ABF0010-ABF9989, ABH0010-ABH9989 and AB10010-AB182073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX SQ Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 943 ATTGGTTTAATCT 955  
Db 13 ATTGGTTGAATTT 1  
RESULT 1127  
ABF85491/C  
ID ABF85491 standard; DNA; 13 BP.  
XX AC ABF85491;  
XX DT 22-FEB-2002 (first entry)  
XX DE Oligonucleotide SEQ ID NO 185488 for detecting SNP TSC0001628.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
OS Homo sapiens.  
XX WO200177384-A2.  
XX PD 18-OCT-2001.  
XX PF 06-APR-2001; 2001WO-IB000713.  
XX PR 07-APR-2000; 2000DE-01019173.  
XX PA (EPIC-) EPIGENOMICS AG.  
XX PI Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX Claim 1; SEQ ID NO 185488; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The



CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 6 A; 2 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGCTTTAAATGTA 956  
 DQ 13 TAGCTTTAAATATA 1

RESULT 1128  
 ABF87623/C  
 ID ABF87623 standard; DNA; 13 BP.

XX AC ABF87623;  
 XX  
 DT 22-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide SEQ ID NO 187620 for detecting SNP TSC0007370.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

XX Claim 1; SEQ ID NO 187620; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX

SQ Sequence 13 BP; 7 A; 2 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGCTTTAA 952  
 DB 13 TTGATTGCTTTAA 1

RESULT 1129  
 ABF63799  
 ID ABF63799 standard; DNA; 13 BP.

XX AC ABF63799;

XX DT 22-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 163796 for detecting SNP TSC0010383.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

XX Claim 1; SEQ ID NO 163796; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX

SQ Sequence 13 BP; 0 A; 7 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 932 CCTCTCTCTTCAT 944  
 DB 1 CCTCTCTTTTCT 13

RESULT 1130  
 ABF91912  
 ID ABF91912 standard; DNA; 13 BP.

XX AC ABF91912;

```

22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 191909 for detecting SNP TSC0047221.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 191909; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
944 TTGGTTTATGTA 956
|||||
1 TTGGTATAGTGA 13
RESULT 1131
PF91913/c
ABF91913 standard; DNA; 13 BP.
ABF91913;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 191910 for detecting SNP TSC0047221.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 191910; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
944 TTGGTTTATGTA 956
|||||
1 TTGGTATAGTGA 13
RESULT 1132
ABH42481/c
ID ABH42481 standard; DNA; 13 BP.
XX ABH42481;
XX ABH42481;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 242458 for detecting SNP TSC0059123.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is

```

PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.

XX Claim 1; SEQ ID NO 242458; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences

SQ Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGGTTTAAAT 953

DB 13 TAATTGGTTTAT 1

RESULT 1133

ABH42676/c

ID ABH42676 standard; DNA; 13 BP.

XX

AC ABH42676;

XX

DT 22-FEB-2002 (first entry)

XX

DE Oligonucleotide SEQ ID NO 242653 for detecting SNP TSC0059200.

XX

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX

CS Homo sapiens.

XX

PN WO200177384-A2.

XX

PD 18-OCT-2001.

XX

PF 06-APR-2001; 2001WO-IB000713.

XX

PR 07-APR-2000; 2000DE-01019173.

XX

XX (EPIG-) EPIGENOMICS AG.

XX

XX Olek A, Piepenbrock C, Berlin K;

XX

DR WPI; 2001-657177/75.

XX

XX Set of oligonucleotides, useful for diagnosis and cell typing, is

PT designed to detect single-nucleotide polymorphisms and cytosine

PT methylation status.

XX

FS Claim 1; SEQ ID NO 242653; 29pp + Sequence Listing; German.

XX

XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073

CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 7 A; 0 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 926 TTTTATCCCTCCT 938

DB 13 TTATTTCCTCCT 1

RESULT 1134

ABH49971

ID ABH49971 standard; DNA; 13 BP.

XX

AC ABH49971;

XX

DT 22-FEB-2002 (first entry)

XX

DE Oligonucleotide SEQ ID NO 249948 for detecting SNP TSC0061046.

XX

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX

OS Homo sapiens.

XX

PN WO200177384-A2.

XX

PD 18-OCT-2001.

XX

PF 06-APR-2001; 2001WO-IB000713.

XX

PR 07-APR-2000; 2000DE-01019173.

XX

XX (EPIG-) EPIGENOMICS AG.

XX

XX Olek A, Piepenbrock C, Berlin K;

XX

DR WPI; 2001-657177/75.

XX

XX Set of oligonucleotides, useful for diagnosis and cell typing, is

PT designed to detect single-nucleotide polymorphisms and cytosine

PT methylation status.

XX

FS Claim 1; SEQ ID NO 249948; 29pp + Sequence Listing; German.

XX

XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences

SQ Sequence 13 BP; 1 A; 7 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 932 CCTCTCTCTTCAT 944

||||| |||||

```

1 CCTCATCTTCT 13
SULT 1135
IC17629/c
ABC17629 standard; DNA; 13 BP.
ABC17629;
20-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 17636 for detecting SNP TSC0003780.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 17636; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation.
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
940 TTCATTGGTTTAA 952
13 TTTATTGGTTTAA 1
SULT 1136
F00944/c
ABF00944 standard; DNA; 13 BP.
ABF00944;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 100941 for detecting SNP TSC0025123.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 100941; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation.
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 4 A; 0 C; 9 G; 0 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 932 CCTCTCTTTCAT 944
Db 13 CCTCTCTTTCAT 1
RESULT 1137
ABC01430
ID ABC01430 standard; DNA; 13 BP.
XX
XX ABC01430;
AC ABC01430;
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 1421 for detecting SNP TSC0000501.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.

```

```

XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX DR
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 1421; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;
SQ
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 940 TTCATTGCTTTAA 952
XX DQ 1 TTTATTGCTTTAA 13
XX
XX RESULT 1138
XX ABC02479/c
XX ID ABC02479 standard; DNA; 13 BP.
XX AC ABC02479;
XX XX
XX 20-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 2470 for detecting SNP TSC0000994.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 2470; 29pp + Sequence Listing; German.
XX
XX

```

```

CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 5 A; 3 C; 0 G; 5 T; 0 U; 0 Other;
SQ
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 943 ATTGCTTTAATGT 955
XX Db 13 ATAGGTATAATGT 1
XX
XX RESULT 1139
XX ABC27658
XX ID ABC27658 standard; DNA; 13 BP.
XX XX
XX AC ABC27658;
XX XX
XX 20-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 27675 for detecting SNP TSC00007753.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 27675; 29pp + Sequence Listing; German.
XX
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX

```

Sequence 13 BP; 1 A; 0 C; 2 G; 10 T; 0 U; 0 Other;	Sequence 13 BP; 1 A; 0 C; 2 G; 10 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;	Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;	Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
938 TCTTCATTGGTTT 950	940 TTCATTGGTTTAA 952
1 TTTTATTGGTTT 13	1 TTTTATTGGTTTAA 13
SULT 1140	RESULT 1142
C52722	ABC36696
ABC52722 standard; DNA; 13 BP.	ID ABC36696 standard; DNA; 13 BP.
ABC52722;	XX ABC36696;
21-FEB-2002 (first entry)	XX ABC36696;
Oligonucleotide SEQ ID NO 52739 for detecting SNP TSC0014605.	DT 20-FEB-2002 (first entry)
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;	XX Oligonucleotide SEQ ID NO 36713 for detecting SNP TSC0011500.
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;	XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
central nervous system; gastrointestinal; respiratory; immune; metabolic.	XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
Homo sapiens.	XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
WO200177384-A2.	OS Homo sapiens.
18-OCT-2001.	
06-APR-2001; 2001WO-IB000713.	
07-APR-2000; 2000DE-01019173.	
(EPIG-) EPIGENOMICS AG.	
Olek A, Piepenbrock C, Berlin K;	
WPI; 2001-657177/75.	
Set of oligonucleotides, useful for diagnosis and cell typing, is	
designed to detect single-nucleotide polymorphisms and cytosine	
methylation status.	
Claim 1; SEQ ID NO 52739; 29pp + Sequence Listing; German.	
This invention describes novel oligonucleotide primers or peptide nucleic	
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)	
and cytosine methylation status in chemically pretreated genomic DNA. The	
oligonucleotides are used for diagnosis and/or prognosis of cancer and a	
range of diseases including immune system, gastrointestinal, respiratory,	
central nervous system, cardiovascular and metabolic disorders. The	
oligonucleotides are also used for detecting cell type differentiation. ABC000010	
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073	
represent the oligomers described in the invention. NOTE: The sequence	
data for this patent did not form part of the printed specification, but	
was obtained in electronic format from WIPO at	
ftp.wipo.int/pub/published_pct_sequences	
Sequence 13 BP; 1 A; 0 C; 2 G; 10 T; 0 U; 0 Other;	
Query Match 13.4%; Score 9.8; DB 1; Length 13;	
Best Local Similarity 84.6%; Pred. No. 1.1e+03;	
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	
904 GTATTTTCTTTG 916	
1 GTATTTTCTTTG 13	
SULT 1141	
IC79542	



central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

944 TTGGTTTAAATGTA 956

13 TTGGTTTAAATTA 1

RESULT 1145

ABF1479/c

ABC91479 standard; DNA; 13 BP.

ABC91479;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 91496 for detecting SNP TSC0022909.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 91496; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 903 GGTCAATTTTCTTT 915

Db 13 GGTAAATTTTTTTT 1

RESULT 1146

ABF1924/c

ID ABF1924 standard; DNA; 13 BP.

XX ABF1924;

DT 21-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 119921 for detecting SNP TSC0029932.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 119921; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 8 A; 0 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 927 TTATCCCTCCCTC 939

Db 13 TTATCCCTCCCTC 1

RESULT 1147

ABF20728

ID ABF20728 standard; DNA; 13 BP.

XX ABF20728;

DT 21-FEB-2002 (first entry)



```

XX DE Oligonucleotide SEQ ID NO 120725 for detecting SNP TSC0030124.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX CS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX XX
XX FF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 120725; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 940 TTCATTGGTTTAA 952
Db ||||| |||||
 1 TTAATTGGGTAA 13

RESULT 1148
ABF31355
ID ABF31355 standard; DNA; 13 BP.
XX AC ABF31355;
XX DT 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 131352 for detecting SNP TSC0032783.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX CS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX XX
XX FF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 131352; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 940 TTCATTGGTTTAA 952
Db ||||| |||||
 1 TTAATTGGGTAA 13

RESULT 1149
ABF33005
ID ABF33005 standard; DNA; 13 BP.
XX AC ABF33005;
XX DT 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 133002 for detecting SNP TSC0033182.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX CS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX XX
XX FF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.

```

Claim 1; SEQ ID NO 133002; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 2 A; 5 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

931 TCCTCTCTCTTCA 943  
|||||  
1 TCCTCTCTCTTCA 13

SULT 1150

F35070  
ABF35070 standard; DNA; 13 BP.

ABF35070;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 135067 for detecting SNP TSC0033671.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 135067; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but

CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences

SQ Sequence 13 BP; 3 A; 1 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGGTTTAA 952  
|||||  
Db 1 TTCATGGTTTAA 13

RESULT 1151

ABF40194/C  
ID ABF40194 standard; DNA; 13 BP.

XX  
AC ABF40194;

DT 21-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 140191 for detecting SNP TSC0035122.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

PN WO200177384-A2.

PD 18-OCT-2001.

PF 06-APR-2001; 2001WO-IB000713.

PR 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

PI Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 140191; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 10 A; 0 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 919 CTTTGCTTTTAT 931  
|||||  
Db 13 CTTTTCCTTTAT 1



Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 161606; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 1 A; 4 C; 0 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

900 CCTGCTCATTTTC 912  
|||||  
1 CCTTTCATTTTC 13

SULT 1155

H37513/c  
ABH37513 standard; DNA; 13 BP.

ABH37513;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 237490 for detecting SNP TSC0057923.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 237490; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX

Sequence 13 BP; 6 A; 2 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 950 TAAATGTAATCGCTA 962  
|||||  
Db 13 TAAATGTATAGTTA 1

RESULT 1156

ABF62345  
ID ABF62345 standard; DNA; 13 BP.

AC ABF62345;

XX 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 162342 for detecting SNP TSC0040831.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 162342; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 2 A; 5 C; 0 G; 6 T; 0 U; 0 Other;

```
Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 929 TATCCCTCCTCTT 941
D 1 TAACTTCCTCTT 13
D 1 TAACTTCCTCTT 13

RESULT 1159
ABF62877
ID ABF62877 standard; DNA; 13 BP.
AC ABF62877;
XX 22-FEB-2002 (first entry)
DE Oligonucleotide SEQ ID NO 162874 for detecting SNP TSC0040950.
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 162874; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 2 A; 8 C; 0 G; 3 T; 0 U; 0 Other;
XX Query Match      13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 932 CCTCTCTCTTCAT 944
D 1 CCTCTCTCTTCAT 13
D 1 CCTCTCTCTTCAT 13

RESULT 1159
ABH42677
ID ABH42677 standard; DNA; 13 BP.
AC ABH42677;
XX 22-FEB-2002 (first entry)
DE Oligonucleotide SEQ ID NO 242654 for detecting SNP TSC0059200.
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 22-FEB-2002 (first entry)
DE Oligonucleotide SEQ ID NO 187615 for detecting SNP TSC0007370.
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 187615; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;
XX Query Match      13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGGTTTAA 952
D 1 TTCATTAGTTTAA 13
D 1 TTCATTAGTTTAA 13

RESULT 1158
ABF62877
ID ABF62877 standard; DNA; 13 BP.
XX
```

18-OCT-2001.  
06-APR-2001; 2001WO-IB000713.  
07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.  
Claim 1; SEQ ID NO 242654; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences  
Sequence 13 BP; 1 A; 5 C; 0 G; 7 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
926 TTTTATCCCTCCT 938  
1 TTTTATCCCTCCT 13  
RESULT 1160  
ABH49489/c  
ABH49489 standard; DNA; 13 BP.  
ABH49489;  
22-FEB-2002 (first entry)  
Oligonucleotide SEQ ID NO 249466 for detecting SNP TSC0060939.  
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.  
Homo sapiens.  
WO200177384-A2.  
18-OCT-2001.  
06-APR-2001; 2001WO-IB000713.  
07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.

PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX Claim 1; SEQ ID NO 249466; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;  
SQ Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
OY 940 TTTCATTGGTTTAA 952  
DB 13 TTTCATTGGTTTAA 1  
RESULT 1161  
ABH63369/c  
ID ABH63369 standard; DNA; 13 BP.  
XX ABH63369;  
AC ABH63369;  
XX 22-FEB-2002 (first entry)  
XX Oligonucleotide SEQ ID NO 263346 for detecting SNP TSC0063861.  
DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
KW Homo sapiens.  
OS WO200177384-A2.  
XX 18-OCT-2001.  
PD 06-APR-2001; 2001WO-IB000713.  
PF 07-APR-2000; 2000DE-01019173.  
PR (EPIG-) EPIGENOMICS AG.  
PA Olek A, Piepenbrock C, Berlin K;  
PI WPI; 2001-657177/75.  
DR Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
PT Claim 1; SEQ ID NO 263346; 29pp + Sequence Listing; German.  
PS This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010

```
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
EQ Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

CY 944 TTGGTTTAATGTA 956
Db      |||||
        |||||TTTATGTA 1

RESULT 1162
ABC73890
ID ABC73890 standard; DNA; 13 BP.
XX
AC ABC73890;
XX
DT 21-FEB-2002 (first entry)
XX
Oligonucleotide SEQ ID NO 73907 for detecting SNP TSC0019023.
XX
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
FN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 73907; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 0 A; 0 C; 2 G; 11 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

CY 909 TTCTTTGGTCTT 921
Db      |||||
        |||||TTTGGTCTT 921
```

```
Db      |||||
        |||||TTTGGTCTT 13

RESULT 1163
ABC99123/c
ID ABC99123 standard; DNA; 13 BP.
XX
AC ABC99123;
XX
DT 21-FEB-2002 (first entry)
XX
Oligonucleotide SEQ ID NO 99140 for detecting SNP TSC0024618.
XX
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
FN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 99140; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 10 A; 2 C; 0 G; 1 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

CY 902 TGCTTATTTCTT 914
Db      |||||
        |||||TTTATTTT 1

RESULT 1164
ABC25061
ID ABC25061 standard; DNA; 13 BP.
XX
AC ABC25061;
XX
DT 20-FEB-2002 (first entry)
XX
Oligonucleotide SEQ ID NO 25078 for detecting SNP TSC0006091.
```

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPITG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

Claim 1; SEQ ID NO 25078; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 2 A; 8 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

930 ATCCCTCCCTTC 942

|||||

1 ATCCCTCCCTTAC 13

RESULT 1165

ABC49928

ABC49928 standard; DNA; 13 BP.

ABC49928;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 49945 for detecting SNP TSC0014079.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPITG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

Claim 1; SEQ ID NO 49945; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 2 A; 0 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

945 TGGTTTAAATGAT 957

|||||

1 TGGTTTAAATGAT 13

RESULT 1166

ABC49929/c

ABC49929 standard; DNA; 13 BP.

ABC49929;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 49946 for detecting SNP TSC0014079.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPITG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

Claim 1; SEQ ID NO 49946; 29pp + Sequence Listing; German.



XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 6 A; 5 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 945 TGGTTTAATGTAT 957  
13 TGGTTTAGGTAT 1

RESULT 1167  
ABC50445/c  
ID ABC50445 standard; DNA; 13 BP.  
AC ABC50445;  
XX  
XX 21-FEB-2002 (first entry)  
XX  
XX Oligonucleotide SEQ ID NO 50462 for detecting SNP TSC0014180.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
XX  
XX Claim 1; SEQ ID NO 50462; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX  
SQ Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 904 GTCATTTCCTTG 916  
13 GTTATTTATTG 1

Db 13 GTTATTTATTG 1

RESULT 1168  
ABC07560/c  
ID ABC07560 standard; DNA; 13 BP.  
XX  
XX ABC07560;  
XX  
XX 20-FEB-2002 (first entry)  
XX  
XX Oligonucleotide SEQ ID NO 7551 for detecting SNP TSC0002177.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
XX  
XX Claim 1; SEQ ID NO 7551; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX  
SQ Sequence 13 BP; 3 A; 2 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 955 TATCGTACCAAC 967  
13 TCTCGCTACGAC 1

Db 13 TCTCGCTACGAC 1

RESULT 1169



XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
XX Claim 1; SEQ ID NO 85829; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;  
SQ  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 905 TCATTTTCTTTGG 917  
D5 1 TTTATTTATTTGG 13  
RESULT 1172  
ABC63520  
ID ABC63520 standard; DNA; 13 BP.  
AC ABC63520;  
XX  
XX 21-FEB-2002 (first entry)  
XX  
XX Oligonucleotide SEQ ID NO 63537 for detecting SNP TSC0016784.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
XX Claim 1; SEQ ID NO 63537; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a

CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;  
SQ

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 945 TGGTTTAATGTAT 957  
D5 1 TGGTTTAATTTT 13

RESULT 1173  
ABC63987  
ID ABC63987 standard; DNA; 13 BP.  
AC ABC63987;  
XX  
XX 21-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 64004 for detecting SNP TSC0016893.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.

XX Claim 1; SEQ ID NO 64004; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX Sequence 13 BP; 2 A; 6 C; 0 G; 5 T; 0 U; 0 Other;  
SQ

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;

```

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
932 CCCTCCTCTTCAT 944
|||||
1 CCCTCCTCATAT 13

SULT 1174
C64467
ABC64467 standard; DNA; 13 BP.
ABC64467;

21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 64484 for detecting SNP TSC0017004.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 64484; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 5 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

931 TCCTCCTCTTCA 943
|||||
1 TCCTACTCTTCA 13

SULT 1175
C40098/c
ABC40098 standard; DNA; 13 BP.
ABC40098;

```

```

DT 21-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 40115 for detecting SNP TSC0012202.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX PS WPI; 2001-657177/75.
XX DR Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 40115; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 9 A; 0 C; 3 G; 1 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 918 TCCTTGCCTTTTA 930
|||||
Db 13 TCCTTCTTTTA 1
RESULT 1176
ABF37092
ID ABF37092 standard; DNA; 13 BP.
XX AC ABF37092;
XX XX 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 137089 for detecting SNP TSC0034252.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.

```

```
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 137089; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 1 A; 0 C; 3 G; 9 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 903 GGTCAATTTCTTT 915
DB 1 GGTATTTTGTGT 13
RESULT 1177
ABF40337/c
ID ABF40337 standard; DNA; 13 BP.
XX AC ABF40337;
XX 21-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 140334 for detecting SNP TSC0035176.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 140337; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 1 A; 0 C; 3 G; 9 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 903 GGTCAATTTCTTT 915
DB 1 GGTATTTTGTGT 13
RESULT 1177
ABF40337/c
ID ABF40337 standard; DNA; 13 BP.
XX AC ABF40337;
XX 21-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 140334 for detecting SNP TSC0035176.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
```

```
PT methylation status.
XX Claim 1; SEQ ID NO 140334; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 944 TTGTTTAAATGTA 956
DB 13 TTGTTTAAATGTA 1
RESULT 1178
ABF40340
ID ABF40340 standard; DNA; 13 BP.
XX AC ABF40340;
XX 21-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 140337 for detecting SNP TSC0035176.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 140337; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
```

data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 2 A; 1 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

944 TTGGTTTAATGTA 956

1 TCGGTTTATTGTA 13

RESULT 1179

ABF40341/c  
ABF40341 standard; DNA; 13 BP.

ABF40341;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 140338 for detecting SNP TSC0035176.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 140338; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 7 A; 3 C; 1 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

944 TTGGTTTAATGTA 956

1 TCGGTTTATTGTA 13

RESULT 1180

ABF69855/c  
ABF69855 standard; DNA; 13 BP.

AC ABF69855;

DT 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 169852 for detecting SNP TSC0042415.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 169852; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 10 A; 2 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 910 TTCTTTGGTCTTT 922

Db 13 TTATTTGGTTTTT 1

RESULT 1181

ABF98051/c  
ABF98051 standard; DNA; 13 BP.

AC ABF98051;

DT 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 198048 for detecting SNP TSC0048746.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX Claim 1; SEQ ID NO 198048; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences  
XX Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;  
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;  
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 944 TTGCTTTAATGTA 956  
Db 13 TTTGTTAGTGA 1  
RESULT 1182  
ABF99129/c  
ID ABF99129 standard; DNA; 13 BP.  
XX AC ABF99129;  
XX 22-FEB-2002 (first entry)  
XX Oligonucleotide SEQ ID NO 199126 for detecting SNP TSC0049008.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX

PA (EPIG-) EPIGENOMICS AG.  
PI Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX Claim 1; SEQ ID NO 199126; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences  
XX Sequence 13 BP; 9 A; 3 C; 0 G; 1 T; 0 U; 0 Other;  
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;  
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 905 TCATTTCCTTGG 917  
Db 13 TCATTTCCTTGG 1  
RESULT 1183  
ABH28980/c  
ID ABH28980 standard; DNA; 13 BP.  
XX AC ABH28980;  
XX 22-FEB-2002 (first entry)  
XX Oligonucleotide SEQ ID NO 228957 for detecting SNP TSC0055846.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX Claim 1; SEQ ID NO 228957; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 6 A; 0 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

925 CTTTATCCCTCC 937

13 CTTTATCCCTCC 1

RESULT 1184

ABF82322 standard; DNA; 13 BP.

ABF82322;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 182319 for detecting SNP TSC0045058.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIC-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 182319; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGGTTAA 952

Db 1 TTTATTGGTTAA 13

RESULT 1185

ABF62344/c standard; DNA; 13 BP.

ABF62344;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 162341 for detecting SNP TSC0040831.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIC-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 162341; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 6 A; 0 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 929 TATCCCTCCTCTT 941

Db 13 TAACCTTCCTCTT 1

RESULT 1186

ABH43548/c standard; DNA; 13 BP.



```

XX ABH43548;
XX AC
XX PD
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 243525 for detecting SNP TSC0059413.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PF Claim 1; SEQ ID NO 243525; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 6 A; 0 C; 6 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
Qy 927 TTATCCCTCCTC 939
Db 13 TCTATCCCTCCTC 1
XX
RESULT 1187
ABC93199
ID ABC93199 standard; DNA; 13 BP.
XX AC
XX AC ABC93199;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 93216 for detecting SNP TSC0023294.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.

```

```

PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.
XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX
XX DR WPI; 2001-657177/75.
XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX
XX PS Claim 1; SEQ ID NO 93216; 29pp + Sequence Listing; German.
XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 2 A; 7 C; 0 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
Qy 928 TTATCCCTCCTCCT 940
Db 1 TTATCCCTCCTCCT 13
XX
RESULT 1188
ABC93202/c
ID ABC93202 standard; DNA; 13 BP.
XX
XX AC ABC93202;
XX
XX DT 21-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 93219 for detecting SNP TSC0023294.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.
XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX
XX DR WPI; 2001-657177/75.

```

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 93219; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 4 A; 1 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

928 TTATCCCTCCCTCT 940  
|||||  
13 TTATCCCGCCCT 1

RESULT 1189

ABC93918  
ABC93918 standard; DNA; 13 BP.

ABC93918;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 93935 for detecting SNP TSC0023471.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
Peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
Central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 93935; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences

SQ Sequence 13 BP; 5 A; 0 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGGTTTAAAT 953

Db 1 TAAATAGGTTTAAAT 13

RESULT 1190

ABC69699

ID ABC69699 standard; DNA; 13 BP.

AC ABC69699;

XX 21-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 69716 for detecting SNP TSC0018143.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.

XX Claim 1; SEQ ID NO 69716; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences

SQ Sequence 13 BP; 0 A; 6 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;



07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
Claim 1; SEQ ID NO 25351; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
Sequence 13 BP; 0 A; 0 C; 3 G; 10 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 910 TTCTTTGGTCTT 922  
DB 13 TTGTTGGTTTT 1  
RESULT 1195  
ABF06601  
ID ABF06601 standard; DNA; 13 BP.  
XX  
XX  
AC ABF06601;  
XX  
DT 21-FEB-2002 (first entry)  
DE Oligonucleotide SEQ ID NO 106598 for detecting SNP TSC0026700.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
OS Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
Claim 1; SEQ ID NO 106598; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
Sequence 13 BP; 0 A; 0 C; 3 G; 10 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
909 TTCTTTGGTCTT 921  
1 TTGTTGGTTTT 13  
RESULT 1194  
IC76533/c  
ID ABC76533 standard; DNA; 13 BP.  
XX  
XX  
AC ABC76533;  
XX  
XX 21-FEB-2002 (first entry)  
XX  
XX Oligonucleotide SEQ ID NO 76550 for detecting SNP TSC0019571.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
OS Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

```

CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 5 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 953 TGTATCGTACCA 965
Lb 1 TTTATCCTTACCA 13

RESULT 1196
ABC31866
ID ABC31866 standard; DNA; 13 BP.
AC ABC31866;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 31863 for detecting SNP TSC0009927.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 31863; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: the sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 1 A; 0 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 909 TTTCTTTGGCTT 921
Lb 1 TTTATTGGGTGT 13

RESULT 1197
ABC07409
ID ABC07409 standard; DNA; 13 BP.
XX
AC ABC07409;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 7400 for detecting SNP TSC0002151.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 7400; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 1 A; 7 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 931 TCCTCTCTCTTCA 943
Lb 1 TCCTCTCTCTCTCA 13

RESULT 1198
ABC84496/C
ID ABC84496 standard; DNA; 13 BP.
XX
AC ABC84496;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 84513 for detecting SNP TSC0021261.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

```

Homo sapiens.  
 WO200177384-A2.  
 18-OCT-2001.  
 06-APR-2001; 2001WO-IB000713.  
 07-APR-2000; 2000DE-01019173.  
 (EPIG-) EPIGENOMICS AG.  
 Olek A, Piepenbrock C, Berlin K;  
 WPI; 2001-657177/75.  
 Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
 Claim 1; SEQ ID NO 84513; 29pp + Sequence Listing; German.  
 This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
 Sequence 13 BP; 7 A; 1 C; 2 G; 3 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 941 TCATTGGTTTAAAT 953  
 13 TCATCGTTTAAAT 1  
 RESULT 1199  
 IC84499  
 ABC84499 standard; DNA; 13 BP.  
 ABC84499;  
 21-FEB-2002 (first entry)  
 Oligonucleotide SEQ ID NO 84516 for detecting SNP TSC0021261.  
 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 Homo sapiens.  
 WO200177384-A2.  
 18-OCT-2001.  
 06-APR-2001; 2001WO-IB000713.  
 07-APR-2000; 2000DE-01019173.  
 (EPIG-) EPIGENOMICS AG.  
 Olek A, Piepenbrock C, Berlin K;  
 WPI; 2001-657177/75.  
 Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
 Claim 1; SEQ ID NO 84516; 29pp + Sequence Listing; German.  
 This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
 Sequence 13 BP; 3 A; 3 C; 1 G; 6 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 941 TCATTGGTTTAAAT 953  
 13 TCATCGTTTAAAT 13  
 RESULT 1200  
 ABC11014/c  
 ID ABC11014 standard; DNA; 13 BP.  
 AC ABC11014;  
 XX  
 XX 20-FEB-2002 (first entry)  
 DE Oligonucleotide SEQ ID NO 11005 for detecting SNP TSC0002724.  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 OS Homo sapiens.  
 XX  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
 XX Claim 1; SEQ ID NO 11005; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The

PI Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
 XX Claim 1; SEQ ID NO 84516; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
 XX Sequence 13 BP; 3 A; 3 C; 1 G; 6 T; 0 U; 0 Other;  
 SQ Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 941 TCATTGGTTTAAAT 953  
 DB 1 TCATCGTTTAAAT 13  
 RESULT 1200  
 ABC11014/c  
 ID ABC11014 standard; DNA; 13 BP.  
 AC ABC11014;  
 XX  
 XX 20-FEB-2002 (first entry)  
 DE Oligonucleotide SEQ ID NO 11005 for detecting SNP TSC0002724.  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 OS Homo sapiens.  
 XX  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.  
 XX Claim 1; SEQ ID NO 11005; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

SQ Sequence 13 BP; 7 A; 0 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 920 TTGCTTTTATC 932  
 |||||  
 Db 13 TTCCCTTCTATC 1

RESULT 1201

ABC38991/c

ID ABC38991 standard; DNA; 13 BP.

XX AC ABC38991;

XX XX

DT 20-FEB-2002 (first entry)

XX XX

DE Oligonucleotide SEQ ID NO 39008 for detecting SNP TSC0011996.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

PF 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

PS Claim 1; SEQ ID NO 39008; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

SQ Sequence 13 BP; 9 A; 3 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 905 TCATTTCTTTGG 917  
 |||||  
 Db 13 TTATTTCTTTGG 1

RESULT 1202

ABC39733

ID ABC39733 standard; DNA; 13 BP.

XX AC ABC39733;

XX XX

DT 20-FEB-2002 (first entry)

XX XX

DE Oligonucleotide SEQ ID NO 39750 for detecting SNP TSC0012139.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

PF 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

PS Claim 1; SEQ ID NO 39750; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

SQ Sequence 13 BP; 3 A; 4 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 921 TTGCTTTTATCC 933  
 |||||  
 Db 1 TTACCTTATATCC 13

RESULT 1203

ABF69854

ID ABF69854 standard; DNA; 13 BP.

XX AC ABF69854;





PT designed to detect single-nucleotide polymorphisms and cytosine  
 XX methylation status.  
 PS Claim 1; SEQ ID NO 164968; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 2 A; 4 C; 0 G; 7 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 927 TTTATCCTCTCTC 939  
 DB 1 TTTATCCTCTCTC 13  
 RESULT 1206  
 ABH15748  
 ID ABH15748 standard; DNA; 13 BP.  
 XX  
 AC ABH15748;  
 XX  
 DT 22-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide SEQ ID NO 215725 for detecting SNP TSC0052470.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200177384-A2.  
 XX  
 PD 18-OCT-2001.  
 XX  
 PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 PR 07-APR-2000; 2000DE-01019173.  
 XX  
 PA (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 DR WPI; 2001-657177/75.  
 XX  
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 PS Claim 1; SEQ ID NO 215725; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 2 A; 4 C; 0 G; 7 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 927 TTTATCCTCTCTC 939  
 DB 1 TTTATCCTCTCTC 13  
 RESULT 1206  
 ABH15748  
 ID ABH15748 standard; DNA; 13 BP.  
 XX  
 AC ABH15748;  
 XX  
 DT 22-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide SEQ ID NO 215725 for detecting SNP TSC0052470.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200177384-A2.  
 XX  
 PD 18-OCT-2001.  
 XX  
 PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 PR 07-APR-2000; 2000DE-01019173.  
 XX  
 PA (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 DR WPI; 2001-657177/75.  
 XX  
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 PS Claim 1; SEQ ID NO 215725; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 2 A; 4 C; 0 G; 7 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 927 TTTATCCTCTCTC 939  
 DB 1 TTTATCCTCTCTC 13

CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 4 A; 0 C; 1 G; 8 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 940 TTCATTGGTTTAA 952  
 DB 1 TTCATTGGTTTAA 13  
 RESULT 1207  
 ABF67028  
 ID ABF67028 standard; DNA; 13 BP.  
 XX  
 AC ABF67028;  
 XX  
 DT 22-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide SEQ ID NO 167025 for detecting SNP TSC0010735.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200177384-A2.  
 XX  
 PD 18-OCT-2001.  
 XX  
 PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 PR 07-APR-2000; 2000DE-01019173.  
 XX  
 PA (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 DR WPI; 2001-657177/75.  
 XX  
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 PS Claim 1; SEQ ID NO 167025; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 1 A; 1 C; 3 G; 8 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 909 TTTCCTTGGCTCT 921  
 DB 1 TTTCCTTGGCTCT 921

KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 OS WO200177384-A2.  
 XX 18-OCT-2001.  
 PD 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 PA Olek A, Piepenbrock C, Berlin K;  
 PI WPI; 2001-657177/75.  
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is  
 XX designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 PT Claim 1; SEQ ID NO 246397; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX SQ Sequence 13 BP; 7 A; 0 C; 2 G; 4 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 950 TAATGTATCGCTA 962  
 Db 13 TAATTTATCTCTA 1  
 RESULT 1210  
 ABH46789  
 ID ABH46789 standard; DNA; 13 BP.  
 XX AC ABH46789;  
 XX 22-FEB-2002 (first entry)  
 XX Oligonucleotide SEQ ID NO 246766 for detecting SNP TSC0060313.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 OS WO200177384-A2.  
 XX 18-OCT-2001.  
 PD 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 PA Olek A, Piepenbrock C, Berlin K;  
 PI WPI; 2001-657177/75.  
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is  
 XX designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 PT Claim 1; SEQ ID NO 167026; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX SQ Sequence 13 BP; 8 A; 3 C; 1 G; 1 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 909 TTTCCTTGTGCTT 921  
 Db 13 TTTCCTTGTGCTT 1  
 RESULT 1209  
 BH46420/c  
 D ABH46420 standard; DNA; 13 BP.  
 XX AC ABH46420;  
 XX 22-FEB-2002 (first entry)  
 XX Oligonucleotide SEQ ID NO 246397 for detecting SNP TSC0060214.

XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 246766; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX SQ Sequence 13 BP; 3 A; 3 C; 0 G; 7 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 919 CTTTGCCTTTTAT 931  
 DQ 1 CTTTACCTTAT 13  
 RESULT 1211  
 ABC93198/c  
 ID ABC93198 standard; DNA; 13 BP.  
 AC ABC93198;  
 XX 21-FEB-2002 (first entry)  
 DT Oligonucleotide SEQ ID NO 93215 for detecting SNP TSC0023294.  
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 OS WO200177384-A2.  
 PN 18-OCT-2001.  
 PD 06-APR-2001; 2001WO-IB000713.  
 PF 07-APR-2000; 2000DE-01019173.  
 PR (EPIG-) EPIGENOMICS AG.  
 PA Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 93215; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX SQ Sequence 13 BP; 4 A; 0 C; 7 G; 2 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 928 TTATCCCTCCCTCT 940  
 DQ 13 TTATCCCAACCCCT 1  
 RESULT 1212  
 ABC19416  
 ID ABC19416 standard; DNA; 13 BP.  
 AC ABC19416;  
 XX 20-FEB-2002 (first entry)  
 DT Oligonucleotide SEQ ID NO 19433 for detecting SNP TSC0004044.  
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 OS WO200177384-A2.  
 PN 18-OCT-2001.  
 PD 06-APR-2001; 2001WO-IB000713.  
 PF 07-APR-2000; 2000DE-01019173.  
 PR (EPIG-) EPIGENOMICS AG.  
 PA Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 19433; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX

```
Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;
Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

940 TTCATTGGCTTTAA 952
||| ||||| |||||
1 TTAGTTGGTTTAA 13

SULT 1213
BC70861 standard; DNA; 13 BP.
ABC20175;
20-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 20192 for detecting SNP TSC0004139.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 20192; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC000010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 4 A; 2 C; 0 G; 7 T; 0 U; 0 Other;
Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

941 TCATTGGCTTTAA 953
||| ||||| |||||
1 TCATTGGCTTTAA 13

SULT 1214
BC70861/c
Sequence 13 BP; 10 A; 3 C; 0 G; 0 T; 0 U; 0 Other;
Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

911 TCATTGGCTTTTG 923
||| ||||| |||||
13 TTTTGGCTTTTG 1

RESULT 1215
ABC73532
ABC73532 standard; DNA; 13 BP.
AC
XX
ABC73532;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 73549 for detecting SNP TSC0018945.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
```

XX PN WO200177384-A2.  
 XX PD 18-OCT-2001.  
 XX PE 06-APR-2001; 2001WO-IB000713.  
 XX PR 07-APR-2000; 2000DE-01019173.  
 XX PA (EPIG-) EPIGENOMICS AG.  
 XX PI Olek A, Piepenbrock C, Berlin K;  
 XX QY WPI; 2001-657177/75.  
 XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 XX PT designed to detect single-nucleotide polymorphisms and cytosine  
 XX PT methylation status.  
 XX PS Claim 1; SEQ ID NO 73549; 29pp + Sequence Listing; German.  
 XX SQ This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABH00010-ABH82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX SQ Sequence 13 BP; 1 A; 0 C; 2 G; 10 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 905 TCATTTCCTTGG 917  
 Db 1 TTTATTTTGG 13  
 RESULT 1216  
 ABC73533/c  
 ID ABC73533 standard; DNA; 13 BP.  
 AC ABC73533;  
 XX 21-FEB-2002 (first entry)  
 DE Oligonucleotide SEQ ID NO 73550 for detecting SNP TSC0018945.  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 XX PT designed to detect single-nucleotide polymorphisms and cytosine  
 XX PT methylation status.  
 XX PS Claim 1; SEQ ID NO 73549; 29pp + Sequence Listing; German.  
 XX SQ This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABH00010-ABH82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX SQ Sequence 13 BP; 1 A; 0 C; 2 G; 10 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 905 TCATTTCCTTGG 917  
 Db 1 TTTATTTTGG 13  
 RESULT 1216  
 ABC73533/c  
 ID ABC73533 standard; DNA; 13 BP.  
 AC ABC73533;  
 XX 21-FEB-2002 (first entry)  
 DE Oligonucleotide SEQ ID NO 73550 for detecting SNP TSC0018945.  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 XX PT designed to detect single-nucleotide polymorphisms and cytosine  
 XX PT methylation status.  
 XX PS Claim 1; SEQ ID NO 73550; 29pp + Sequence Listing; German.  
 XX SQ This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABH00010-ABH82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX SQ Sequence 13 BP; 10 A; 2 C; 0 G; 1 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 905 TCATTTCCTTGG 917  
 Db 13 TTTATTTTGG 1  
 RESULT 1217  
 ABC73891/c  
 ID ABC73891 standard; DNA; 13 BP.  
 AC ABC73891;  
 XX 21-FEB-2002 (first entry)  
 DE Oligonucleotide SEQ ID NO 73908 for detecting SNP TSC0019023.  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 XX PT designed to detect single-nucleotide polymorphisms and cytosine  
 XX PT methylation status.  
 XX PS Claim 1; SEQ ID NO 73908; 29pp + Sequence Listing; German.  
 XX SQ This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,

DR WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 73550; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABH00010-ABH82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX SQ Sequence 13 BP; 10 A; 2 C; 0 G; 1 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 905 TCATTTCCTTGG 917  
 Db 13 TTTATTTTGG 1  
 RESULT 1217  
 ABC73891/c  
 ID ABC73891 standard; DNA; 13 BP.  
 AC ABC73891;  
 XX 21-FEB-2002 (first entry)  
 DE Oligonucleotide SEQ ID NO 73908 for detecting SNP TSC0019023.  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 XX PT designed to detect single-nucleotide polymorphisms and cytosine  
 XX PT methylation status.  
 XX PS Claim 1; SEQ ID NO 73908; 29pp + Sequence Listing; German.  
 XX SQ This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,

central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 11 A; 2 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

909 TTCTTTGGTCTT 921  
|||||  
13 TTTTCTTGGTCTT 1

RESULT 1218

ABF00942/c  
ABF00942 standard; DNA; 13 BP.

ABF00942;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 100939 for detecting SNP TSC0025123.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 100939; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 4 A; 0 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 932 CCTCTCTCTTCAT 944

|||||  
Db 13 CCTCTCTCTTCCT 1

RESULT 1219

ABF00943  
ABF00943 standard; DNA; 13 BP.

AC ABF00943;

DT 21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 100940 for detecting SNP TSC0025123.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 100940; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 1 A; 8 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 932 CCTCTCTCTTCAT 944

|||||  
Db 1 CCTCTCTCTTCCT 13

RESULT 1220

ABC54453/c  
ABC54453 standard; DNA; 13 BP.

AC ABC54453;

DT 21-FEB-2002 (first entry)

```

XX DE Oligonucleotide SEQ ID NO 54470 for detecting SNP TSC0014932.
XX XX
XX XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX XX
XX OS Homo sapiens.
XX XX
XX PN WO200177384-A2.
XX XX
XX PD 18-OCT-2001.
XX XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX XX
XX PR 07-APR-2000; 2000DE-01019173.
XX XX
XX PA (EPIG-) EPIGENOMICS AG.
XX XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX XX
XX DR WPI; 2001-657177/75.
XX XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX XX
XX PS Claim 1; SEQ ID NO 54470; 29pp + Sequence Listing; German.
XX XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX XX
XX SQ Sequence 13 BP; 7 A; 1 C; 0 G; 5 T; 0 U; 0 Other;
XX XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Q/ 941 TCATTGTTTAAAT 953
Db | | | | | | | | | |
13 TAATTGATTAAAT 1

RESULT 1221
ABC31867/c
ID ABC31867 standard; DNA; 13 BP.
XX AC
XX AC ABC31867;
XX XX
XX DT 20-FEB-2002 (first entry)
XX XX
XX DE Oligonucleotide SEQ ID NO 31884 for detecting SNP TSC0009927.
XX XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX XX
XX OS Homo sapiens.
XX XX
XX PN WO200177384-A2.
XX XX
XX PD 18-OCT-2001.
XX XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX XX
XX PR 07-APR-2000; 2000DE-01019173.
XX XX
XX PA (EPIG-) EPIGENOMICS AG.
XX XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX XX
XX DR WPI; 2001-657177/75.
XX XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX XX
XX PS Claim 1; SEQ ID NO 54470; 29pp + Sequence Listing; German.
XX XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX XX
XX SQ Sequence 13 BP; 7 A; 1 C; 0 G; 5 T; 0 U; 0 Other;
XX XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Q/ 941 TCATTGTTTAAAT 953
Db | | | | | | | | | |
13 TAATTGATTAAAT 1

RESULT 1222
ABC07557
ID ABC07557 standard; DNA; 13 BP.
XX AC
XX AC ABC07557;
XX XX
XX DT 20-FEB-2002 (first entry)
XX XX
XX DE Oligonucleotide SEQ ID NO 7548 for detecting SNP TSC0002177.
XX XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX XX
XX OS Homo sapiens.
XX XX
XX PN WO200177384-A2.
XX XX
XX PD 18-OCT-2001.
XX XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX XX
XX PR 07-APR-2000; 2000DE-01019173.
XX XX
XX PA (EPIG-) EPIGENOMICS AG.
XX XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX XX
XX DR WPI; 2001-657177/75.
XX XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.

```

Claim 1; SEQ ID NO 7548; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 4 A; 5 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

955 TATCGCTACCAAC 967  
1 TCTCGCTACCAAC 13

RESULT 1223

ABC59211/c  
ABC59211 standard; DNA; 13 BP.

ABC59211;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 59228 for detecting SNP TSC0015869.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 59228; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but

CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences

SQ Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATGGTTTAAAT 953

Db 13 TTATGGTTTAT 1

RESULT 1224

ABC12390

ID ABC12390 standard; DNA; 13 BP.

XX

AC ABC12390;

DT 20-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 12397 for detecting SNP TSC0002937.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX Claim 1; SEQ ID NO 12397; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 0 A; 0 C; 2 G; 11 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 910 TTCTTTGGTCTTT 922

Db 1 TTTTGGTCTTTT 13



```

RESULT 1225
ABF27949
ID ABF27949 standard; DNA; 13 BP.
XX
AC ABF27949;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 127946 for detecting SNP TSC0032026.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
EN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WIPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 127946; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 1 A; 6 C; 0 G; 6 T; 0 U; 0 Other;
XX
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 932 CCTCTCTTCTTCAT 944
||| ||| |||
Db 1 CCTCTCTTCTTCTT 13

RESULT 1226
ABF39538
ID ABF39538 standard; DNA; 13 BP.
XX
AC ABF39538;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 139535 for detecting SNP TSC0034938.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
EN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.

```

```

KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WIPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 139535; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;
XX
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGTTTAAATGTA 956
||| ||| |||
Db 1 TTGTTTAAATGTA 13

RESULT 1227
ABF96259
ID ABF96259 standard; DNA; 13 BP.
XX
AC ABF96259;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 196256 for detecting SNP TSC0048296.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
EN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.

```

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 196256; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 0 A; 6 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

926 TTTTATCCCTCCT 938  
|||||  
1 TTTTTCCTCCCT 13

RESULT 1228

ABH21400/C

ABH21400 standard; DNA; 13 BP.

ABH21400;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 221377 for detecting SNP TSC0053879.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 221377; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 6 A; 0 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

928 TTTTATCCCTCCT 940  
|||||  
13 TTTTTCCTCCCT 1

RESULT 1229

ABH25678

ABH25678 standard; DNA; 13 BP.

ABH25678;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 225655 for detecting SNP TSC0055005.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 225655; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 4 A; 0 C; 1 G; 8 T; 0 U; 0 Other;

```

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGGTTTAATGTA 956
DB 1 TTTGTTTAATATA 13

RESULT 1230
ABF81687/c
ID ABF78387 standard; DNA; 13 BP.
XX
AC ABF78387;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 178384 for detecting SNP TSC0009992.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
XX
Claim 1; SEQ ID NO 178384; 29pp + Sequence Listing; German.
XX
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
XX
Sequence 13 BP; 8 A; 3 C; 1 G; 1 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 918 TCATTGCGTTTAA 930
DB 13 TGTTCGCTTTTA 1

RESULT 1231
ABF81688/c
ID ABF81688 standard; DNA; 13 BP.
XX

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 909 TTTCTTTGGTCTT 921
DB 13 TTTCTTTTCTT 1

RESULT 1232
ABF81887/c
ID ABF81887 standard; DNA; 13 BP.
XX
AC ABF81887;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 181884 for detecting SNP TSC0044958.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.

```

```

AC ABF81688;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 181685 for detecting SNP TSC0044924.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
XX
Claim 1; SEQ ID NO 181685; 29pp + Sequence Listing; German.
XX
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
XX
Sequence 13 BP; 11 A; 0 C; 2 G; 0 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 909 TTTCTTTGGTCTT 921
DB 13 TTTCTTTTCTT 1

RESULT 1232
ABF81887/c
ID ABF81887 standard; DNA; 13 BP.
XX
AC ABF81887;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 181884 for detecting SNP TSC0044958.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.

```



CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

XX SQ Sequence 13 BP; 9 A; 0 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 926 TTTTATCCCTCCT 938  
 ||||| |||||  
 Db 13 TTTTTCCTCCT 1

RESULT 1235  
 ABF85490  
 ID ABF85490 standard; DNA; 13 BP.

XX AC ABF85490;

XX DT 22-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 185487 for detecting SNP TSC0001628.

XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX PN WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX DR WPI; 2001-657177/75.

XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

XX PS Claim 1; SEQ ID NO 185487; 29pp + Sequence Listing; German.

XX CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

XX SQ Sequence 13 BP; 5 A; 0 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 944 TTGTTTAATGTA 956

Db 1 TAGGTTTAATATA 13

RESULT 1236  
 ABF61761/c  
 ID ABF61761 standard; DNA; 13 BP.

XX AC ABF61761;

XX DT 22-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 161758 for detecting SNP TSC0040719.

XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX PN WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX DR WPI; 2001-657177/75.

XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

XX PS Claim 1; SEQ ID NO 161758; 29pp + Sequence Listing; German.

XX CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

XX SQ Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 947 GTTTAATGTAATCG 959

Db 13 GTTTAATGTAATAG 1

RESULT 1237  
 ABF62878/c  
 ID ABF62878 standard; DNA; 13 BP.

XX AC ABF62878;

XX DT 22-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 162875 for detecting SNP TSC0040950.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

Claim 1; SEQ ID NO 162875; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABG9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 3 A; 0 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

932 CCCTCCTCTTCAT 944

|||||  
13 CCCTCCCTTCAT 1

33ULT 1238

3F91291

ABF91291 standard; DNA; 13 BP.

ABF91291;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 191288 for detecting SNP TSC0047057.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

Claim 1; SEQ ID NO 191288; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABG9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 1 A; 4 C; 0 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

922 TGCTTTTATCCC 934

|||||  
1 TTCTTTTATCCC 13

RESULT 1239

ABH42480

ID ABH42480 standard; DNA; 13 BP.

ABH42480;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 242457 for detecting SNP TSC0059123.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.

Claim 1; SEQ ID NO 242457; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX

XX Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;  
SQ

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGGTTTAA 953  
Db 1 TAATTGGTTTAT 13

RESULT 1240  
ABH43380  
ID ABH43380 standard; DNA; 13 BP.  
XX  
AC ABH43380;  
XX  
DT 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 243357 for detecting SNP TSC0059367.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
CS Homo sapiens.  
XX  
PN WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 243357; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX

XX Sequence 13 BP; 3 A; 0 C; 1 G; 9 T; 0 U; 0 Other;  
SQ

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGGTTTAA 952  
Db 1 TTATTGTTTAA 13

RESULT 1241  
ABH63368  
ID ABH63368 standard; DNA; 13 BP.  
XX  
AC ABH63368;  
XX  
DT 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 263345 for detecting SNP TSC0063861.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
CS Homo sapiens.  
XX  
PN WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 263345; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX

XX Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;  
SQ

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGGTTTAAATGTA 956  
Db 1 TTAGTTTAAATGTA 13

RESULT 1242

C95909  
ABC95909 standard; DNA; 13 BP.  
ABC95909;  
21-FEB-2002 (first entry)  
Oligonucleotide SEQ ID NO 95926 for detecting SNP TSC0023860.  
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.  
Homo sapiens.  
WO200177384-A2.  
18-OCT-2001.  
06-APR-2001; 2001WO-IB000713.  
07-APR-2000; 2000DE-01019173.  
(EPIG-) EPIGENOMICS AG.  
Olek A, Piepenbrock C, Berlin K;  
WPI; 2001-657177/75.  
Set of oligonucleotides, useful for diagnosis and cell typing, is  
designed to detect single-nucleotide polymorphisms and cytosine  
methylation status.  
Claim 1; SEQ ID NO 53429; 29pp + Sequence Listing; German.  
This invention describes novel oligonucleotide primers or peptide nucleic  
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
and cytosine methylation status in chemically pretreated genomic DNA. The  
oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
range of diseases including immune system, gastrointestinal, respiratory,  
central nervous system, cardiovascular and metabolic disorders. The  
oligonucleotides are also used for detecting cell type differentiation. ABC00010  
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
represent the oligomers described in the invention. NOTE: The sequence  
data for this patent did not form part of the printed specification, but  
was obtained in electronic format from WIPO at  
ftp.wipo.int/pub/published\_pct\_sequences  
Sequence 13 BP; 5 A; 4 C; 1 G; 3 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
/ 953 TGTATGCTACCA 965  
1 TATACGCTACCA 13  
RESULT 1243  
BC53412  
ABC53412 standard; DNA; 13 BP.  
ABC53412;  
21-FEB-2002 (first entry)  
Oligonucleotide SEQ ID NO 53429 for detecting SNP TSC0014750.  
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.  
X

OS Homo sapiens.  
XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX Claim 1; SEQ ID NO 53429; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences  
XX Sequence 13 BP; 5 A; 0 C; 2 G; 6 T; 0 U; 0 Other;  
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;  
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 940 TTCATTGGTTTAA 952  
Db 1 TTAATGTTTAA 13  
RESULT 1244  
ABF06600/c  
ID ABF06600 standard; DNA; 13 BP.  
XX AC ABF06600;  
XX AC  
XX 21-FEB-2002 (first entry)  
XX DE Oligonucleotide SEQ ID NO 106597 for detecting SNP TSC0026700.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX



XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 106597; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX Sequence 13 BP; 5 A; 0 C; 5 G; 3 T; 0 U; 0 Other;  
 SQ

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 953 TGTATCGCTACCA 965  
 Db 13 TTTATCCCTACCA 1

RESULT 1245  
 ABC32799  
 ID ABC32799 standard; DNA; 13 BP.  
 AC ABC32799;  
 XX 20-FEB-2002 (first entry)  
 DE Oligonucleotide SEQ ID NO 32816 for detecting SNP TSC0010303.  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 CS WO200177384-A2.  
 PN 18-OCT-2001.  
 PD 06-APR-2001; 2001WO-IB000713.  
 PF 07-APR-2000; 2000DE-01019173.  
 PR (EPIG-) EPIGENOMICS AG.  
 PA Olek A, Piepenbrock C, Berlin K;  
 PI WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 32816; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX Sequence 13 BP; 5 A; 0 C; 5 G; 3 T; 0 U; 0 Other;  
 SQ

CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX Sequence 13 BP; 1 A; 6 C; 0 G; 6 T; 0 U; 0 Other;  
 SQ

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 933 CCTCTCTTCTACT 945  
 Db 1 CCTCTCTTCTACT 13

RESULT 1246  
 ABC11015  
 ID ABC11015 standard; DNA; 13 BP.  
 AC ABC11015;  
 XX 20-FEB-2002 (first entry)  
 DE Oligonucleotide SEQ ID NO 11006 for detecting SNP TSC0002724.  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 CS WO200177384-A2.  
 PN 18-OCT-2001.  
 PD 06-APR-2001; 2001WO-IB000713.  
 PF 07-APR-2000; 2000DE-01019173.  
 PR (EPIG-) EPIGENOMICS AG.  
 PA Olek A, Piepenbrock C, Berlin K;  
 PI WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 11006; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX Sequence 13 BP; 1 A; 5 C; 0 G; 7 T; 0 U; 0 Other;  
 SQ

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;

```

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

920 TTTCCTCTTATC 932
    ||| ||| ||| |||
    1 TTTCCTCTTATC 13

RESULT 1247
ABC85460/c
ABC85460 standard; DNA; 13 BP.
ABC85460;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 85477 for detecting SNP TSC0021481.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 85477; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI92073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 6 A; 0 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Y 928 TTATCCCTCTCT 940
    ||| ||| ||| |||
    13 TTATCCCTACTAT 1

RESULT 1248
ABC38990
ABC38990 standard; DNA; 13 BP.
ABC38990;
X
```

```

DT 20-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 39007 for detecting SNP TSC0011996.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 39007; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI92073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 1 A; 0 C; 3 G; 9 T; 0 U; 0 Other;
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 905 TCATTTTCTTGG 917
    ||| ||| ||| |||
    1 TTATTTTGTGG 13

RESULT 1249
ABF15150/c
ID ABF15150 standard; DNA; 13 BP.
XX AC ABF15150;
XX 21-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 115147 for detecting SNP TSC0028845.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX
```

XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 115147; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 XX Sequence 13 BP; 8 A; 0 C; 4 G; 1 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 919 CTTTGCCTTTAT 931  
 Db 13 CTTTGCCTTTAT 1  
 RESULT 1250  
 ABF15151  
 ID ABF15151 standard; DNA; 13 BP.  
 AC ABF15151;  
 XX 21-FEB-2002 (first entry)  
 DE Oligonucleotide SEQ ID NO 115148 for detecting SNP TSC0028845.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 OS  
 XX WO200177384-A2.  
 PN  
 XX 18-OCT-2001.  
 PD  
 XX 06-APR-2001; 2001WO-IB000713.  
 PF  
 XX 07-APR-2000; 2000DE-01019173.  
 PR (EPIG-) EPIGENOMICS AG.  
 PA Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 PI  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 115147; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 XX Sequence 13 BP; 8 A; 0 C; 4 G; 1 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 919 CTTTGCCTTTAT 931  
 Db 13 CTTTGCCTTTAT 1  
 RESULT 1250  
 ABF15151  
 ID ABF15151 standard; DNA; 13 BP.  
 AC ABF15151;  
 XX 21-FEB-2002 (first entry)  
 DE Oligonucleotide SEQ ID NO 115148 for detecting SNP TSC0028845.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 OS  
 XX WO200177384-A2.  
 PN  
 XX 18-OCT-2001.  
 PD  
 XX 06-APR-2001; 2001WO-IB000713.  
 PF  
 XX 07-APR-2000; 2000DE-01019173.  
 PR (EPIG-) EPIGENOMICS AG.  
 PA Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 PI  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

PT methylation status.  
 XX Claim 1; SEQ ID NO 115148; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 XX Sequence 13 BP; 1 A; 4 C; 0 G; 8 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 919 CTTTGCCTTTAT 931  
 Db 1 CTTTGCCTTTAT 13  
 RESULT 1251  
 ABF29011/c  
 ID ABF29011 standard; DNA; 13 BP.  
 XX AC ABF29011;  
 XX 21-FEB-2002 (first entry)  
 DE Oligonucleotide SEQ ID NO 129008 for detecting SNP TSC0032298.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 OS  
 XX WO200177384-A2.  
 PN  
 XX 18-OCT-2001.  
 PD  
 XX 06-APR-2001; 2001WO-IB000713.  
 PF  
 XX 07-APR-2000; 2000DE-01019173.  
 PR (EPIG-) EPIGENOMICS AG.  
 PA Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 PI  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 129008; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence

Mon Oct 18 14:40:13 2004

schultz1-899.rng

data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

941 TCATTGTTTAAAT 953  
13 TTATGGTTTACT 1

RESULT 1252  
ABF33001  
ID ABF33001 standard; DNA; 13 BP.  
XX  
AC ABF33001;  
XX  
DT 21-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 132998 for detecting SNP TSC0033182.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
PN WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 132998; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 3 A; 5 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 931 TCCCTCTCTCTCA 943  
DB 1 TCCCTCATTTCA 13

RESULT 1253

ABF37093/C  
ID ABF37093 standard; DNA; 13 BP.  
XX  
AC ABF37093;  
XX  
DT 21-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 137090 for detecting SNP TSC0034252.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
PN WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 137090; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 9 A; 3 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 903 GGTCAATTTCTTT 915  
DB 13 GGTATATTTGTTT 1

RESULT 1254

ABH21754/C  
ID ABH21754 standard; DNA; 13 BP.  
XX  
AC ABH21754;  
XX  
DT 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 221731 for detecting SNP TSC0053965.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
OS Homo sapiens.  
XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX Claim 1; SEQ ID NO 221731; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences  
XX Sequence 13 BP; 4 A; 0 C; 7 G; 2 T; 0 U; 0 Other;  
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;  
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
CY 924 CCTTTATCCCTC 936  
DB 13 CCTTTATCCCTC 1  
RESULT 1255  
ABF53571/c  
ID ABF53571 standard; DNA; 13 BP.  
AC ABF53571;  
XX 21-FEB-2002 (first entry)  
XX Oligonucleotide SEQ ID NO 153568 for detecting SNP TSC0038820.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX This invention describes novel oligonucleotide primers or peptide nucleic

PA (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX Claim 1; SEQ ID NO 153568; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences  
XX Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;  
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;  
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 940 TTCATGGTTTAA 952  
DB 13 TTTTGTGTTTAA 1  
RESULT 1256  
ABH29805  
ID ABH29805 standard; DNA; 13 BP.  
AC ABH29805;  
XX 22-FEB-2002 (first entry)  
XX Oligonucleotide SEQ ID NO 229782 for detecting SNP TSC0056047.  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX Homo sapiens.  
XX WO200177384-A2.  
XX 18-OCT-2001.  
XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX Claim 1; SEQ ID NO 229782; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 1 A; 5 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

931 TCCCTCCCTTCA 943

1 TTCCCTCTTCA 13

RESULT 1257

ABH07557/C  
ABH07557 standard; DNA; 13 BP.

ABH07557;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 207534 for detecting SNP TSC0004679.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 207534; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGGTTTAAATGA 956

Db 13 TTGTGTTGATGA 1

RESULT 1258

ABH12090  
ABH12090 standard; DNA; 13 BP.

ABH12090;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 212067 for detecting SNP TSC0051683.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 212067; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 2 A; 0 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 904 GTCATTTCCTTG 916

Db 1 GTGATTTCCTTG 13

RESULT 1259

ABH37737/C  
ABH37737 standard; DNA; 13 BP.

XX ABH37737;  
 XX  
 XX DT 22-FEB-2002 (first entry)  
 XX  
 XX DE Oligonucleotide SEQ ID NO 237714 for detecting SNP TSC0057979.  
 XX  
 XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 XX OS Homo sapiens.  
 XX  
 XX PN WO200177384-A2.  
 XX  
 XX PD 18-OCT-2001.  
 XX  
 XX PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 XX PR 07-APR-2000; 2000DE-01019173.  
 XX  
 XX PA (EPIG-) EPIGENOMICS AG.  
 XX  
 XX PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 XX DR WPI; 2001-657177/75.  
 XX  
 XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 XX PS Claim 1; SEQ ID NO 237714; 29pp + Sequence Listing; German.  
 XX  
 XX CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF0010-ABF99989, ABH0010-ABH99989 and AB10010-AB182073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 XX SQ Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;  
 XX  
 XX Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 XX  
 XX QY 947 GTTTAAATGTCG 959  
 XX |||||  
 XX Dd 13 GTTTAAATGTTTG 1  
 XX  
 XX RESULT 1260  
 XX ABF87619/c  
 XX ID ABF87619 standard; DNA; 13 BP.  
 XX  
 XX AC ABF87619;  
 XX  
 XX DT 22-FEB-2002 (first entry)  
 XX  
 XX DE Oligonucleotide SEQ ID NO 187616 for detecting SNP TSC0007370.  
 XX  
 XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 XX OS Homo sapiens.  
 XX  
 XX PN WO200177384-A2.  
 XX  
 XX PD 18-OCT-2001.  
 XX  
 XX PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 XX PR 07-APR-2000; 2000DE-01019173.  
 XX  
 XX PA (EPIG-) EPIGENOMICS AG.  
 XX  
 XX PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 XX DR WPI; 2001-657177/75.

PN WO200177384-A2.  
 XX  
 XX PD 18-OCT-2001.  
 XX  
 XX PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 XX PR 07-APR-2000; 2000DE-01019173.  
 XX  
 XX PA (EPIG-) EPIGENOMICS AG.  
 XX  
 XX PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 XX DR WPI; 2001-657177/75.  
 XX  
 XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 XX PS Claim 1; SEQ ID NO 187616; 29pp + Sequence Listing; German.  
 XX  
 XX CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF0010-ABF99989, ABH0010-ABH99989 and AB10010-AB182073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 XX SQ Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;  
 XX  
 XX Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 XX  
 XX QY 940 TTCATTGCTTTAA 952  
 XX |||||  
 XX Dd 13 TTGATTAGTTTAA 1  
 XX  
 XX RESULT 1261  
 XX ABF65507/c  
 XX ID ABF65507 standard; DNA; 13 BP.  
 XX  
 XX AC ABF65507;  
 XX  
 XX DT 22-FEB-2002 (first entry)  
 XX  
 XX DE Oligonucleotide SEQ ID NO 165504 for detecting SNP TSC0041502.  
 XX  
 XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 XX OS Homo sapiens.  
 XX  
 XX PN WO200177384-A2.  
 XX  
 XX PD 18-OCT-2001.  
 XX  
 XX PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 XX PR 07-APR-2000; 2000DE-01019173.  
 XX  
 XX PA (EPIG-) EPIGENOMICS AG.  
 XX  
 XX PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 XX DR WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 165504; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 13 BP; 6 A; 4 C; 1 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

940 TTCATTGGTTAA 952  
13 TTTCGGTGGTTAA 1

RESULT 1262  
BH43381/c  
ABH43381 standard; DNA; 13 BP.

ABH43381;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 243358 for detecting SNP TSC0059367.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 243358; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

CC oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 9 A; 1 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

940 TTCATTGGTTAA 952  
13 TTTCATTGGTTAA 1

RESULT 1263  
ABH46788/c  
ABH46788 standard; DNA; 13 BP.

ABH46788;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 246765 for detecting SNP TSC0060313.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 246765; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 7 A; 0 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;



QY 919 CTTTGCTTTTAT 931  
 Db 13 CTTTACCTTATAT 1

RESULT 1264  
 ABH48134/C  
 ID ABH48134 standard; DNA; 13 BP.  
 XX AC ABH48134;  
 XX DT 22-FEB-2002 (first entry)  
 XX DE Oligonucleotide SEQ ID NO 248111 for detecting SNP TSC0060637.  
 XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX OS Homo sapiens.  
 XX PN WO200177384-A2.  
 XX PD 18-OCT-2001.  
 XX PF 06-APR-2001; 2001WO-IB000713.  
 XX PR 07-APR-2000; 2000DE-01019173.  
 XX PA (EPIG-) EPIGENOMICS AG.  
 XX PI Olek A, Piepenbrock C, Berlin K;  
 XX DR WPI; 2001-657177/75.  
 XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX PS Claim 1; SEQ ID NO 248111; 29pp + Sequence Listing; German.  
 XX CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX SQ Sequence 13 BP; 6 A; 1 C; 3 G; 3 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGCTTTAAT 953  
 Db 13 TCATTGCTTTAAT 1

RESULT 1265  
 ABH56629/C  
 ID ABH56629 standard; DNA; 13 BP.  
 XX AC ABH56629;  
 XX DT 22-FEB-2002 (first entry)  
 XX DE Oligonucleotide SEQ ID NO 258450 for detecting SNP TSC0062845.  
 XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX OS Homo sapiens.  
 XX PN WO200177384-A2.  
 XX PD 18-OCT-2001.  
 XX PF 06-APR-2001; 2001WO-IB000713.

DE Oligonucleotide SEQ ID NO 256606 for detecting SNP TSC0009817.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX OS Homo sapiens.  
 XX PN WO200177384-A2.  
 XX PD 18-OCT-2001.  
 XX PF 06-APR-2001; 2001WO-IB000713.  
 XX PR 07-APR-2000; 2000DE-01019173.  
 XX PA (EPIG-) EPIGENOMICS AG.  
 XX PI Olek A, Piepenbrock C, Berlin K;  
 XX DR WPI; 2001-657177/75.  
 XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX PS Claim 1; SEQ ID NO 256606; 29pp + Sequence Listing; German.  
 XX CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX SQ Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGCTTTAA 952  
 Db 13 TTAATTGCTTTA 1

RESULT 1266  
 ABH58473  
 ID ABH58473 standard; DNA; 13 BP.  
 XX AC ABH58473;  
 XX DT 22-FEB-2002 (first entry)  
 XX DE Oligonucleotide SEQ ID NO 258450 for detecting SNP TSC0062845.  
 XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX OS Homo sapiens.  
 XX PN WO200177384-A2.  
 XX PD 18-OCT-2001.  
 XX PF 06-APR-2001; 2001WO-IB000713.

PS Claim 1; SEQ ID NO 266282; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABT00010-ABT2073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 1 A; 5 C; 0 G; 7 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 931 TCCTCTCTCTCA 943  
 Db 1 TCCTCTCTCTCA 13  
 RESULT 1268  
 ABZ22350/c  
 ID ABZ22350 standard; DNA; 13 BP.  
 XX  
 AC ABZ22350;  
 XX  
 DT 21-MAR-2003 (first entry)  
 XX  
 DE Green fluorescent protein related PCR primer.  
 XX  
 KW Green fluorescent protein; GFP; plasmid; bacterial; recombinase A; recA;  
 KW plant; PCR primer; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN KR2002027383-A.  
 XX  
 PD 13-APR-2002.  
 XX  
 PF 03-JAN-2002; 2002KR-00000218.  
 XX  
 PR 03-JAN-2002; 2002KR-00000218.  
 XX  
 PA (KORE-) KOREA RES INST BIOSCIENCE & BIOTECHNOLOG.  
 XX  
 PI Han SG, Jung SW, Jung WJ, Min SR, Yoo JR;  
 XX  
 DR WPI; 2002-747906/81.  
 XX  
 PT Transforming plasmid using bacterial recombinase a (reca).  
 XX  
 PS Example; Page 6; 11pp; Korean.  
 XX  
 CC The present invention describes a method for transforming a plasmid using  
 CC bacterial recombinase A (reca), and thereby increasing efficiency of the  
 CC homologous recombination to decrease the selection frequency for the  
 CC preparation of homoplasmies. The method for transforming the plasmid using  
 CC reca comprises: (a) preparing a reca expression vector for transforming  
 CC plant nuclei, containing the reca gene and plasmid targeting sequence;  
 CC (b) transforming a plant with the reca expression vector to prepare a  
 CC first nuclei transformed plant; (c) preparing a vector for transforming  
 CC plant plasmid, containing at least one desired gene and a selection  
 CC marker gene; and (d) transforming plasmid produced by the first nuclei  
 CC transformed plant with the vector for transforming plant plasmid to  
 CC prepare a second transformed plant, in which the selection marker is 16S  
 CC ribosome subunit having tolerance to spectinomycin or streptomycin,  
 CC protein having tolerance to spectinomycin or streptomycin, or enzyme such

07-APR-2000; 2000DE-01019173.  
 (EPIG-) EPIGENOMICS AG.  
 Olek A, Piepenbrock C, Berlin K;  
 WPI; 2001-657177/75.  
 Set of oligonucleotides, useful for diagnosis and cell typing, is  
 designed to detect single-nucleotide polymorphisms and cytosine  
 methylation status.  
 Claim 1; SEQ ID NO 258450; 29pp + Sequence Listing; German.  
 This invention describes novel oligonucleotide primers or peptide nucleic  
 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 and cytosine methylation status in chemically pretreated genomic DNA. The  
 oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 range of diseases including immune system, gastrointestinal, respiratory,  
 central nervous system, cardiovascular and metabolic disorders. The  
 oligomers are also used for detecting cell type differentiation. ABC00010  
 -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABT00010-ABT2073  
 represent the oligomers described in the invention. NOTE: The sequence  
 data for this patent did not form part of the printed specification, but  
 was obtained in electronic format from WIPO at  
 ftp.wipo.int/pub/published\_pct\_sequences  
 K  
 Q Sequence 13 BP; 3 A; 2 C; 0 G; 8 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 Y 919 CTTTGCTTTTAT 931  
 b 1 CTTTGCTTTTAT 13  
 RESULT 1267  
 BH66305  
 D ABH66305 standard; DNA; 13 BP.  
 X  
 C ABH66305;  
 X  
 T 22-FEB-2002 (first entry)  
 X  
 E Oligonucleotide SEQ ID NO 266282 for detecting SNP TSC0000410.  
 X  
 W SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 W peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 W central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 X  
 S Homo sapiens.  
 X  
 N WO200177384-A2.  
 X  
 D 18-OCT-2001.  
 X  
 F 06-APR-2001; 2001WO-IB000713.  
 X  
 R 07-APR-2000; 2000DE-01019173.  
 X  
 A (EPIG-) EPIGENOMICS AG.  
 X  
 PI Olek A, Piepenbrock C, Berlin K;  
 X  
 DR WPI; 2001-657177/75.  
 X  
 CC Set of oligonucleotides, useful for diagnosis and cell typing, is  
 CC designed to detect single-nucleotide polymorphisms and cytosine  
 CC methylation status.  
 CC

CC as cytosine deaminase and HADH and/or GFP (green fluorescence protein).  
 CC The present sequence represents a PCR primer for GFP which is used in the  
 CC exemplification of the present invention  
 XX  
 SQ Sequence 13 BP; 6 A; 1 C; 4 G; 2 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 926 TTTATCCCTCCT 938  
 Db 13 TGTATACCTCCT 1  
 RESULT 1269  
 ACD56505  
 ID ACD56505 standard; RNA; 13 BP.  
 XX  
 AC ACD56505;  
 XX  
 DT 24-SEP-2003 (first entry)  
 XX  
 DE HBV enzymatic nucleic acid substrate sequence #186.  
 XX  
 KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
 KW RNA stability; RNA expression; RNA synthesis; antisense;  
 KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;  
 KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;  
 KW HBV reverse transcriptase; Enhancer I region; viral replication;  
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
 KW virucide; antiinflammatory; substrate; ss.  
 XX  
 OS Hepatitis B virus.  
 XX  
 EN WO200281494-A1.  
 XX  
 PD 17-OCT-2002.  
 XX  
 XX 26-MAR-2002; 2002WO-US009187.  
 XX  
 PR 26-MAR-2001; 2001US-00817879.  
 PR 08-JUN-2001; 2001US-00877478.  
 PR 08-JUN-2001; 2001US-0296876P.  
 PR 24-OCT-2001; 2001US-0335059P.  
 PR 05-DEC-2001; 2001US-0337055P.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 FA (BLAT/) BLATT L.  
 FA (MACE/) MACEJAK D.  
 FA (MCSW/) MCSWIGGEN J.  
 FA (MORR/) MORRISSEY J.  
 FA (PVC/) PAVCO P.  
 FA (LEEP/) LEE P.  
 FA (DRAP/) DRAPER K.  
 FA (ROBE/) ROBERTS E.  
 XX  
 FI Blatt L, Macejak D, Mcswiggen J, Morrissey J, Pavco P, Lee P;  
 PI Draper K, Roberts E;  
 XX  
 XX WPI; 2003-229207/22.  
 DR  
 XX  
 PT Novel compound useful for treating cirrhosis, liver failure,  
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
 PT infection.  
 XX  
 PS Example 1; Page 221; 387pp; English.  
 XX  
 CC The present invention relates to nucleic acid molecules which modulate  
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNzymes,

CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed  
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
 CC DNA. The nucleic acids may be used to modulate the expression of HBV  
 CC genes and HBV viral replication. Also disclosed is a method for screening  
 CC compounds and/or potential therapies directed against HBV, and compounds  
 CC that modulate the expression and/or replication of HCV. The compounds and  
 CC methods of the invention are useful for the treatment of degenerative and  
 CC disease states related to HBV and HCV infection, replication and gene  
 CC expression such as cirrhosis, liver failure, and hepatocellular  
 CC carcinoma. The present sequence represents a substrate for one of the HBV  
 CC enzymatic nucleic acid sequences disclosed in the present invention  
 XX  
 SQ Sequence 13 BP; 0 A; 4 C; 3 G; 0 T; 6 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 13;  
 Best Local Similarity 38.5%; Pred. No. 1.1e+03;  
 Matches 5; Conservative 6; Mismatches 2; Indels 0; Gaps 0;  
 QY 917 GTCTTGGCCTTT 929  
 Db 1 GUCUGGCCUUCU 13  
 RESULT 1270  
 AAQ78380  
 ID AAQ78380 standard; DNA; 14 BP.  
 XX  
 AC AAQ78380;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 27-JUN-1995 (first entry)  
 XX  
 DE Antisense oligonucleotide hybridising to TGF-beta gene.  
 XX  
 KW Transforming growth factor beta; TGF-beta; antisense; treatment; tumour;  
 KW angiogenesis; breast tumour; neurofibroma; glioma; glioblastoma;  
 KW carcinogenesis; carcinoma; oesophagus; oesophageal; gastric; gut;  
 KW immunosuppression; oligonucleotide; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9425588-A2.  
 XX  
 PD 10-NOV-1994.  
 XX  
 PF 29-APR-1994; 94WO-EP001362.  
 XX  
 PR 30-APR-1993; 93EP-00107089.  
 PR 13-MAY-1993; 93EP-00107849.  
 XX  
 PA (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.  
 XX  
 PI Schlingensiepen G, Brysch W, Schlingensiepen K, Schlingensiepen R;  
 PI Bogdahn U;  
 XX  
 DR WPI; 1994-358266/44.  
 XX  
 XX New transforming growth factor beta antisense oligonucleotide(s) - for  
 PT treating immunosuppression, tumours, etc.  
 XX  
 PS Claim 6; Page 32; 74pp; English.  
 XX  
 CC The antisense oligonucleotides are useful in the treatment of tumours in  
 CC which expression of TGF-beta is of relevance for pathogenicity and/or  
 CC inhibition of pathological angiogenesis. They are used especially for the  
 CC treatment of the immunosuppressive effect of TGF-beta, augmentation of  
 CC the proliferation of cytotoxic lymphocytes, treatment of endogenous  
 CC hyperexpression of TGF-beta, treatment of breast tumours, neurofibromas  
 CC and malignant gliomas, including glioblastomas, treatment and prophylaxis  
 CC of skin carcinogenesis, and treatment of oesophageal and gastric  
 CC carcinomas. See AAQ78352-Q78488. The sequences given in GENESEQ files

AAQ78352-Q78407 and AAQ78488 are antisense oligodeoxynucleotides of TGF-beta 1. The sequences given in GENESQ files AAQ78408-78487 are antisense oligodeoxynucleotides of TGF-beta 2 in the form of phosphorothioate analogues. (Updated on 25-MAR-2003 to correct PN field.)

Sequence 14 BP; 1 A; 4 C; 3 G; 6 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 14;  
Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

928 TTATCCCTCCTCT 940  
|||||  
2 TTATCCCTCCTGT 14

RESULT 1271  
AX56923/c  
D AAX56923 standard; DNA; 14 BP.

AX56923;  
16-OCT-2003 (revised)  
15-JUL-1999 (first entry)

3 HIV-1 proviral DNA fragment 6.  
DNA-targeting conjugate; anticancer drug; viral DNA-cleaving agent;  
viral DNA-binding agent; solid support; primer; ss.

Human immunodeficiency virus 1.

WO9531434-A1.

23-NOV-1995.

12-MAY-1995; 95WO-US006379.

13-MAY-1994; 94US-00242664.

(SLOK) SLOAN KETTERING INST CANCER RES.

(ZWB1-) ZW BIOMEDICAL RES AG.

Watanabe KA, Ren W, Weil R;

WPI; 1996-010846/01.

Derivatised solid supports and reagents for oligonucleotide synthesis - and new oligo:nucleotide phosphoramidate conjugates.

Disclosure; Page 43; 68pp; English.

This invention describes novel derivatised solid supports of formula S'-L -Z-CH2CH2-R, where: S' = a solid support; L = a bond or an (in)organic linker; Z = SO2 or S-S; R = OH, an H-phosphate, alkanephosphonate, phosphotriester, phosphate triester, phosphite diester, phosphorothioate, phosphorothioate, phosphite diester or phosphoramidate group, OR1, SR1, an optionally substituted or modified nucleotide (N'), or an oligonucleotide of formula (N')gR2; g = 1-200; R1 = a protecting group; R2 = an H-phosphate, alkanephosphonate, phosphotriester, phosphate triester, phosphite diester, phosphorothioate, phosphorodithioate, phosphoramidate or phosphoramidite group, OH, OR1, SR1 or R3(CH2CH2CH2CN)OCH2CH2CH2CH2CH2OR1. Also mentioned are compounds of formula R3(CH2CH2CH2CH2CH2R4, where: R3 = a protecting group; and R4 = OH or an H-phosphate, alkanephosphonate, phosphotriester, phosphite triester, phosphite diester, phosphorothioate, phosphorodithioate, phosphoramidate or phosphoramidite group. Also claimed are new phosphoramidates, a process for preparing an oligonucleotide 5'-phosphate, a process for preparing a solid support useful for preparation of an oligonucleotide 3'-phosphate and a process for preparing an oligonucleotide 3',5'-diphosphate. The oligonucleotide 3'- and/or 5'-phosphates may be used to prepare DNA-targeting conjugates, e.g. with anticancer drugs or viral (e.g. HIV) DNA-

cleaving or -binding agents. The process for preparing oligonucleotide 3',5'-diphosphates is simple and suitable for use in automatic DNA synthesizers. This sequence represents a fragment of the HIV-1 provirus genome, used to describe the method of the invention. (Updated on 16-OCT-2003 to standardise OS field)

Sequence 14 BP; 10 A; 0 C; 4 G; 0 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 14;  
Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

919 CTTTGCCTTTAT 931  
|||||  
13 CTTTGCCTTTT 1

RESULT 1272  
AAT76230  
ID AAT76230 standard; DNA; 14 BP.

AAT76230;

12-SEP-1997 (first entry)

Human IL5 receptor antisense oligonucleotide.

Asthma; airway epithelium; adenocarcinoma; cystic fibrosis;

chronic obstructive pulmonary disease; bronchitis; interleukin; ss.

Synthetic.

WO9640162-A1.

19-DEC-1996.

06-JUN-1996; 96WO-US009306.

07-JUN-1995; 95US-00474497.

(UYEC-) UNIV EAST CAROLINA.

Nyce JW, Metzger WJ;

WPI; 1997-051871/05.

Treatment of airway diseases such as asthma - by topically applying adenocarcinoma-free antisense oligonucleotide to airway epithelium of subject.

Example 5; Page 31; 71pp; English.

A method for treating airway disease in a subject has been produced, which involves the topical administration of an essentially adenocarcinoma-free antisense oligonucleotide (ON) to the airway epithelium of the subject. The present sequence is an antisense oligonucleotide specific for the human IL5 receptor. The method can be used to treat airway diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary disease, bronchitis and other airway diseases characterised by an inflammatory response. By eliminating adenocarcinoma from the antisense ON, its liberation upon antisense degradation is prevented, thereby preventing adenocarcinoma-induced bronchoconstriction in patients with hyper-reactive airways

Sequence 14 BP; 0 A; 4 C; 2 G; 8 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 14;  
Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

909 TTTCTTGGTCTT 921  
|||||  
1 TTTCTTGGTCTT 13



AA33470  
AAA33470 standard; DNA; 14 BP.  
AAA33470;  
28-JUL-2000 (first entry)  
Low adenosine antisense oligonucleotide SEQ ID NO:1159.  
Human; adenosine receptor; low adenosine antisense oligonucleotide;  
phosphorothioate; impaired respiration; inflammation; allergy;  
allergic disease; bronchoconstriction; inhibitor; antiinflammatory;  
antiallergic; antiasthmatic; cytotatic; analgesic; impaired airway;  
lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;  
respiratory distress syndrome; pain; cystic fibrosis; emphysema;  
pulmonary hypertension; chronic obstructive pulmonary disease; COPD;  
cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.  
Homo sapiens.  
WO200009525-A2.  
24-FEB-2000.  
03-AUG-1999; 99WO-US017712.  
03-AUG-1998; 98US-0095212P.  
(UYEC-) UNIV EAST CAROLINA.  
Nyce JW;  
WPI; 2000-205971/18.  
New antisense oligonucleotides useful for treating e.g. pulmonary  
vasoconstriction, inflammation, allergies, asthma, hypertension,  
bronchitis, emphysema, respiratory distress syndrome, ischemia or  
cancers.  
Claim 18; Page 410; 1343pp; English.  
The present invention describes a new composition comprising an antisense  
oligonucleotide (ON) with low adenosine (up to 15%), which targets  
nucleic acids involved in bronchoconstriction, allergies, and/or  
inflammation. The ON can have antiinflammatory, antiallergic,  
antiasthmatic, cytotatic and analgesic activities. The compositions are  
useful for the treatment of diseases associated with inflammation,  
impaired airways, including lung disease and diseases whose secondary  
effects afflict the lungs of a subject. They can be used for treating  
e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,  
impaired respiration, respiratory distress syndrome, pain, cystic  
fibrosis, pulmonary hypertension, emphysema, chronic obstructive  
pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,  
carcinomas, and cancers which may metastasize to the lungs, including  
breast and prostate cancer. The reduction of the adenosine content of  
ONs reduces side effects. The A-containing ONs break down with the  
release of deoxyadenosine which activates adenosine receptors causing  
bronchoconstriction and inflammation. AAA33313 to AAA35312 represent the  
nucleotide sequences given in the sequence listing from the present  
invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185  
sequences are also called SEQ ID NO:1 to 185, but the sequences differ  
from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to  
AAA33992) are specifically claimed ONs from the present invention. N.B.  
Sequences given in the disclosure of the present invention do not match  
up with their corresponding SEQ ID NO: sequences given in the sequence  
listing  
Sequence 14 BP; 0 A; 4 C; 2 G; 8 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 14;  
Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 909 TTCTTTGCTCTT 921  
|| |||| ||||  
Db 1 TTCTTTGCTCTT 13  
RESULT 1276  
AAF19592  
ID AAF19592 standard; DNA; 14 BP.  
XX  
AC AAF19592;  
XX  
DT 14-MAR-2001 (first entry)  
XX  
DE Human IL5 receptor polynucleotide fragment #1159.  
XX  
KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;  
human; airway disorder; bronchoconstriction; lung inflammation;  
surfactant depletion; respiratory; bronchodilator; antiinflammatory;  
immunosuppressive; antiasthmatic; analgesic; hypotensive; cytotatic;  
respiratory obstruction; pulmonary vasoconstriction; asthma; RDS;  
surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;  
respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;  
pulmonary hypertension; emphysema; pulmonary transplantation rejection;  
chronic obstructive pulmonary disease; pulmonary infection; bronchitis;  
cancer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200062736-A2.  
XX  
PD 26-OCT-2000.  
XX  
XX 24-MAR-2000; 2000WO-US008020.  
XX  
PF 06-APR-1999; 99US-0127958P.  
PR  
XX (UYEC-) UNIV EAST CAROLINA.  
PA (NYCE/) NYCE J.W.  
XX  
XX Nyce JW;  
XX  
XX WPI; 2000-679539/66.  
DR  
XX Low adenosine (A) content antisense oligonucleotides which do not trigger  
adenosine receptors during metabolism, useful e.g. for treating cancers  
and respiratory obstructions.  
XX  
FS Claim 14; Page 209; 1592pp; English.  
XX  
CC The present invention describes low adenosine (A) content antisense  
oligonucleotides and compositions (I) comprising them. In the antisense  
oligonucleotides the A is replaced by a 'Universal' or alternative base.  
CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,  
CC immunosuppressive, antiasthmatic, hypotensive and cytotatic activities.  
CC The antisense oligonucleotides and (I) can be used to down-regulate the  
CC expression and or activity of target polypeptides associated with  
CC lung/respiratory disorders and malignancies, such as stimulating and  
CC activating peptide factors and transmitters, transcription factors,  
CC immunoglobulins and antibodies, antibody receptors, cytokines and  
CC chemokines, endogenously produced specific and non-specific enzymes,  
CC binding proteins, adhesion molecules and their receptors, cytokine and  
CC chemokine receptors, adenosine receptors, bradykinin receptors, central  
CC nervous system (CNS) and peripheral nervous and non-nervous system  
CC receptors, CNS and peripheral nervous and non-nervous system peptide  
CC transmitters, defensins, growth factors, vasoactive peptides and  
CC receptors, binding proteins and malignancy associated proteins. The  
CC antisense oligonucleotides may be used in this way to treat disorders  
CC including respiratory obstruction (especially pulmonary obstruction  
CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or  
CC surfactant hypoproduction which are associated with a disease or  
CC condition selected from pulmonary vasoconstriction, inflammation,  
CC allergies, asthma, impaired respiration, respiratory distress syndrome  
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary

CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),  
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,  
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide  
 CC fragments and antisense oligonucleotides used in the exemplification of  
 CC the present invention

XX  
 SQ Sequence 14 BP; 0 A; 4 C; 2 G; 8 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 14;  
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 909 TTTCCTTGCTCT 921  
 || ||||| |||||  
 DB 1 TTCCCTTGCTCT 13

RESULT 1277  
 ABZ72881/C  
 ID ABZ72881 standard; RNA; 14 BP.  
 XX AC ABZ72881;  
 XX  
 DT 09-APR-2003 (first entry)  
 XX  
 DE Rod opsin hairpin ribozyme oligonucleotide.  
 XX  
 KW Hairpin ribozyme; hammerhead ribozyme; ribozyme; retinal disease; target;  
 KW ophthalmological; gene therapy; eye; retinal dysfunction; AAV;  
 KW diabetic retinopathy; macular degeneration; autosomal dominant retinitis;  
 KW blood-retinal barrier dysfunction; adeno-associated virus; blindness; ss.

XX Synthetic.  
 OS Homo sapiens.  
 XX  
 PN WO200288320-A2.  
 XX  
 PD 07-NOV-2002.

XX  
 PF 01-MAY-2002; 2002WO-US013679.  
 XX  
 PR 01-MAY-2001; 2001US-00847601.

XX (UYFL ) UNIV FLORIDA.

XX Lewin AS, Shaw LC, Grant MB;

XX WPI; 2003-111880/10.

XX  
 PT A recombinant adeno-associated virus-vectored ribozyme composition,  
 PT useful for treating a disease or dysfunction of the mammalian eye e.g.  
 PT retinal disease, e.g. diabetic retinopathy or age-related macular  
 PT degeneration.

XX Example 5; Page 61; 115pp; English.

XX The present invention describes a recombinant adeno-associated virus  
 CC (AAV) vectored ribozyme composition (I). (I) comprises: (a) at least a  
 CC first ribozyme that specifically cleaves an mRNA encoding a protein,  
 CC polypeptide, or peptide selected from the group of rod opsin, INOS,  
 CC RDS/peripherin, VEGFR1, VEGFR2, adenosine A-2B receptor, IGF-1, integrin  
 CC alpha 1, integrin alpha 3, integrin alpha 5, or integrin alpha V; (b) a  
 CC vector comprising a polynucleotide encoding the ribozyme, where the  
 CC polynucleotide operably positioned downstream of at least a first  
 CC promoter that directs expression of the polynucleotide in a selected  
 CC mammalian cell transformed with the vector; (c) a viral particle  
 CC comprising the ribozyme or the polynucleotide; (d) an AAV vector  
 CC comprising the ribozyme or the polynucleotide; or (e) a host cell  
 CC for decreasing the amount of mRNA encoding a selected polypeptide in a  
 CC retinal cell of a mammalian eye, comprising providing to the eye the  
 CC composition described above, and for a time effective to specifically  
 CC cleave the mRNA in the cell. (I) has ophthalmological activity, and can

CC be used in gene therapy. (I) can be used for treating a disease or  
 CC dysfunction of the mammalian eye, such as a retinal disease or retinal  
 CC degeneration, (diabetic) retinopathy, or (age-related) macular  
 CC degeneration. (I) is also useful for manufacturing a medicament for  
 CC treating the diseases mentioned above, including autosomal dominant  
 CC retinitis or a blood-retinal barrier dysfunction. (I) can also be useful  
 CC for treating, decreasing the severity, or ameliorating the symptoms of a  
 CC pathological condition, e.g. atrophic or pigmented lesions of the eye,  
 CC blindness, a reduction in central or peripheral vision, or a reduction in  
 CC total vision. ABZ72763 to ABZ72953 represent sequences used in the  
 CC exemplification of the present invention

XX Sequence 14 BP; 6 A; 1 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 14;  
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 922 TGCCTTTATCCC 934  
 ||||| |||||  
 DB 14 TGCCTTTATCCC 2

RESULT 1278

ABZ72882/C

ID ABZ72882 standard; RNA; 14 BP.

XX AC ABZ72882;

XX

DT 09-APR-2003 (first entry)

XX

DE Rod opsin hairpin ribozyme oligonucleotide.

XX

KW Hairpin ribozyme; hammerhead ribozyme; ribozyme; retinal disease; target;  
 KW ophthalmological; gene therapy; eye; retinal dysfunction; AAV;  
 KW diabetic retinopathy; macular degeneration; autosomal dominant retinitis;  
 KW blood-retinal barrier dysfunction; adeno-associated virus; blindness; ss.

XX Synthetic.

OS Homo sapiens.

XX WO200288320-A2.

XX

PD 07-NOV-2002.

XX

PF 01-MAY-2002; 2002WO-US013679.

XX

PR 01-MAY-2001; 2001US-00847601.

XX

PA (UYFL ) UNIV FLORIDA.

XX

PI Lewin AS, Shaw LC, Grant MB;

XX

DR WPI; 2003-111880/10.

XX

PT A recombinant adeno-associated virus-vectored ribozyme composition,  
 PT useful for treating a disease or dysfunction of the mammalian eye e.g.  
 PT retinal disease, e.g. diabetic retinopathy or age-related macular  
 PT degeneration.

XX Example 5; Page 61; 115pp; English.

XX The present invention describes a recombinant adeno-associated virus  
 CC (AAV) vectored ribozyme composition (I). (I) comprises: (a) at least a  
 CC first ribozyme that specifically cleaves an mRNA encoding a protein,  
 CC polypeptide, or peptide selected from the group of rod opsin, INOS,  
 CC RDS/peripherin, VEGFR1, VEGFR2, adenosine A-2B receptor, IGF-1, integrin  
 CC alpha 1, integrin alpha 3, integrin alpha 5, or integrin alpha V; (b) a  
 CC vector comprising a polynucleotide encoding the ribozyme, where the  
 CC polynucleotide operably positioned downstream of at least a first  
 CC promoter that directs expression of the polynucleotide in a selected  
 CC mammalian cell transformed with the vector; (c) a viral particle  
 CC comprising the ribozyme or the polynucleotide; (d) an AAV vector

comprising the ribozyme or the polynucleotide; or (e) a host cell comprising the ribozyme or the polynucleotide. Also described is a method for decreasing the amount of mRNA encoding a selected polypeptide in a retinal cell of a mammalian eye, comprising providing to the eye the composition described above, and for a time effective to specifically cleave the mRNA in the cell. (I) has ophthalmological activity, and can be used in gene therapy. (II) can be used for treating a disease or dysfunction of the mammalian eye, such as a retinal disease or retinal dysfunction, (diabetic) retinopathy, or (age-related) macular degeneration. (II) is also useful for manufacturing a medicament for treating the diseases mentioned above, including autosomal dominant retinitis or a blood-retinal barrier dysfunction. (I) can also be useful for treating, decreasing the severity, or ameliorating the symptoms of a pathological condition, e.g. atrophic or pigmented lesions of the eye, blindness, a reduction in central or peripheral vision, or a reduction in total vision. ABZ72763 to ABZ72953 represent sequences used in the exemplification of the present invention

Sequence 14 BP; 6 A; 1 C; 7 G; 0 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 14;  
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Y 922 TGCTTTTATCCC 934  
 |||||  
 C 14 TGCTTTTATCCC 2

ESULT 1279  
 BZ95286  
 D ABZ95286 standard; DNA; 14 BP.  
 X C ABZ95286;  
 X 17-OCT-2003 (first entry)  
 T Human IL-5 receptor antisense fragment no.1150.  
 E Human; antisense; lung dysfunction; nasal airway dysfunction;  
 X antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
 W antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
 W antisense gene therapy; respiratory; lung; adenosine sensitivity;  
 W adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
 W lung inflammation; respiratory disease; ds.  
 X Homo sapiens.  
 NS WO200285308-A2.  
 X 31-OCT-2002.  
 X 23-APR-2002; 2002WO-US013135.  
 F 24-APR-2001; 2001US-0286137P.  
 X (EFIG-) EPIGENESIS PHARM INC.  
 X Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 T Miller S, Tang L, Shahabuddin S;  
 X WPI; 2003-229219/22.  
 X Pharmaceutical composition for treating ailments associated with impaired  
 T respiration, has oligo(s) antisense to specific gene(s) or its  
 T corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
 T ubiquinone.  
 X Disclosure; SEQ ID NO 10528; 872pp; English.  
 X The invention relates to a novel pharmaceutical composition, which has a  
 C first active agent comprising an oligonucleotide antisense to the  
 C initiation codon, coding region, 5' or 3' end genomic flanking regions,

5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
 CC junctions of genes encoding a polypeptide associated with lung and/or  
 CC nasal airway dysfunction and a second active agent comprising an  
 CC antiinflammatory steroid and ubiquinone. A composition of the invention  
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
 CC immunosuppressive, and cytostatic activity. The composition may have a  
 CC use in antisense gene therapy. The composition is useful for treating or  
 CC preventing a respiratory, lung or malignant disease or condition, also  
 CC for enhancing the prophylactic or therapeutic respiratory effect of an  
 CC antiinflammatory steroid in a subject, for reducing or depleting levels  
 CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or  
 CC receptor, producing bronchodilation, increasing levels of bronchoconstriction,  
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
 CC lung inflammation, lung allergies, or a respiratory disease or condition.  
 CC Note: The sequence data for this patent is not represented in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 14 BP; 0 A; 4 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 14;  
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 909 TTCTTTGGTCTT 921  
 |||||  
 Db 1 TTCTTTGGTCTT 13

RESULT 1280  
 ID AAQ26613 standard; DNA; 15 BP.  
 XX AC AAQ26613;  
 XX 25-MAR-2003 (revised)  
 DT 15-JAN-1993 (first entry)  
 XX HBV triplex probe.  
 DE detection; hybridisation; probes; primers; target sequence;  
 XX pathogenic organisms; bacteria; fungi; virus; retrovirus; ss.  
 XX Hepatitis B virus.  
 XX WO9211390-A1.  
 XX 09-JUL-1992.  
 XX 11-DEC-1991; 91WO-US009402.  
 XX 17-DEC-1990; 90US-00629601.  
 XX (IDEX-) IDEXX LAB INC.  
 XX Vary CPH;  
 XX WPI; 1992-250109/30.  
 XX Nucleic acid sequence detection by triple helix formation for pathogenic  
 PT organisms - comprises amplifying in vitro to give product duplex(es) and  
 PT detecting one duplex by hybridising with a third strand of nucleic acid  
 PT without denaturation.  
 XX Claim 45; Page 59; 80pp; English.  
 PS This sequence is a triplex probe complementary to the duplex PCR product  
 XX following amplification of a triple helix forming target sequence, and  
 CC could be used to detect the presence of HBV. See also AAQ26566-614  
 CC (Updated on 25-MAR-2003 to correct PN field.)  
 XX Sequence 15 BP; 6 A; 0 C; 9 G; 0 T; 0 U; 0 Other;



```

Query Match      13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 84.6%; Pred. No. 1.2e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY  924 CCTTTATCCCTC 936
Db   13 CCTTCTCCTCC 1

RESULT 1281
AAQ38155
ID  AAQ38155 standard; DNA; 15 BP.
XX
AC  AAQ38155;
XX
DT  25-MAR-2003 (revised)
OT  01-JUL-1993 (first entry)
XX
DE  Mycobacterium 23S rRNA non-exclusive probe/primer #3.
XX
KW  Primer; probe; 16S; 23S; rRNA; Mycobacteria; subgeneric; class; rDNA;
KW  hybridisation; amplify; PCR; ss.
OS  Synthetic.
XX
PN  WO9304201-A1.
XX
PD  04-MAR-1993.
XX
PF  13-AUG-1992; 92WO-US006821.
XX
PR  13-AUG-1991; 91US-00744282.
XX
PA  (STAD ) AMOCO CORP.
XX
PI  Liu J, Nietupski RM, Shah JS;
XX  WPI; 1993-094026/11.
XX
PT  Oligo-nucleotide(s) complementary to Mycobacterial ribosomal RNA or DNA -
PT  used for detection and identification of Mycobacterial in hybridisation
PT  and amplification assays.
XX
PS  Disclosure; Page 20; 121pp; English.
XX
CC  The sequences given in AAQ38150-59 are primer/probes which correspond to
CC  a region 5' of the 16S and 23S rRNA genes of Mycobacterial sp. and
CC  members of subgeneric classes. These oligomers hybridise to >10% of other
CC  bacterial sp. including mycobacterium sp., these are non-exclusive. The
CC  primer/probe sequences given in AAQ38108-46 hybridise under assay
CC  conditions to rRNA/rDNA from >90% of common mycobacterium sp., these
CC  oligomers are non-exclusive. All these oligomers can be used to detect
CC  Mycobacterium and their subgeneric classes by hybridisation or by
CC  amplification. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ  Sequence 15 BP; 2 A; 6 C; 1 G; 5 T; 0 U; 1 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 73.3%; Pred. No. 1.2e+03;
Matches 11; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY  920 TTGCGTTTATCC 934
Db   1 TTAGCGTTTACCCC 15

RESULT 1282
AAQ38157
ID  AAQ38157 standard; DNA; 15 BP.
XX
AC  AAQ38157;
XX
DT  25-MAR-2003 (revised)
OT  01-JUL-1993 (first entry)
XX
DE  Mycobacterium 23S rRNA non-exclusive probe/primer #3.
XX
KW  Primer; probe; 16S; 23S; rRNA; Mycobacteria; subgeneric; class; rDNA;
KW  hybridisation; amplify; PCR; ss.
OS  Synthetic.
XX
PN  WO9304201-A1.
XX
PD  04-MAR-1993.
XX
PF  13-AUG-1992; 92WO-US006821.
XX
PR  13-AUG-1991; 91US-00744282.
XX
PA  (STAD ) AMOCO CORP.
XX
PI  Liu J, Nietupski RM, Shah JS;
XX  WPI; 1993-094026/11.
XX
PT  Oligo-nucleotide(s) complementary to Mycobacterial ribosomal RNA or DNA -
PT  used for detection and identification of Mycobacterial in hybridisation
PT  and amplification assays.
XX
PS  Disclosure; Page 20; 121pp; English.
XX
CC  The sequences given in AAQ38150-59 are primer/probes which correspond to
CC  a region 5' of the 16S and 23S rRNA genes of Mycobacterial sp. and
CC  members of subgeneric classes. These oligomers hybridise to >10% of other
CC  bacterial sp. including mycobacterium sp., these are non-exclusive. The
CC  primer/probe sequences given in AAQ38108-46 hybridise under assay
CC  conditions to rRNA/rDNA from >90% of common mycobacterium sp., these
CC  oligomers are non-exclusive. All these oligomers can be used to detect
CC  Mycobacterium and their subgeneric classes by hybridisation or by
CC  amplification. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ  Sequence 15 BP; 2 A; 6 C; 1 G; 5 T; 0 U; 1 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 73.3%; Pred. No. 1.2e+03;
Matches 11; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY  920 TTGCGTTTATCC 934
Db   1 TTAGCGTTTACCCC 15

RESULT 1282
AAQ38157
ID  AAQ38157 standard; DNA; 15 BP.
XX
AC  AAQ38157;
XX
DT  25-MAR-2003 (revised)
OT  01-JUL-1993 (first entry)
XX
DE  Mycobacterium 23S rRNA non-exclusive probe/primer #5.
XX
KW  Primer; probe; 16S; 23S; rRNA; Mycobacteria; subgeneric; class; rDNA;
KW  hybridisation; amplify; PCR; ss.
OS  Synthetic.
XX
PN  WO9304201-A1.
XX
PD  04-MAR-1993.
XX
PF  13-AUG-1992; 92WO-US006821.
XX
PR  13-AUG-1991; 91US-00744282.
XX
PA  (STAD ) AMOCO CORP.
XX
PI  Liu J, Nietupski RM, Shah JS;
XX  WPI; 1993-094026/11.
XX
PT  Oligo-nucleotide(s) complementary to Mycobacterial ribosomal RNA or DNA -
PT  used for detection and identification of Mycobacterial in hybridisation
PT  and amplification assays.
XX
PS  Disclosure; Page 20; 121pp; English.
XX
CC  The sequences given in AAQ38150-59 are primer/probes which correspond to
CC  a region 5' of the 16S and 23S rRNA genes of Mycobacterial sp. and
CC  members of subgeneric classes. These oligomers hybridise to >10% of other
CC  bacterial sp. including mycobacterium sp., these are non-exclusive. The
CC  primer/probe sequences given in AAQ38108-46 hybridise under assay
CC  conditions to rRNA/rDNA from >90% of common mycobacterium sp., these
CC  oligomers are non-exclusive. All these oligomers can be used to detect
CC  Mycobacterium and their subgeneric classes by hybridisation or by
CC  amplification. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ  Sequence 15 BP; 1 A; 6 C; 2 G; 5 T; 0 U; 1 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 73.3%; Pred. No. 1.2e+03;
Matches 11; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY  920 TTGCGTTTATCC 934
Db   1 TTGCGTTTACCCC 15

RESULT 1283
AAQ68767
ID  AAQ68767 standard; DNA; 15 BP.
XX
AC  AAQ68767;
XX
DT  19-FEB-1995 (first entry)
DE  CHA255 heavy chain CDR3 clone 3.7.1. coding sequence.
XX
KW  Polymerase chain reaction; primer; PCR; amplify; heavy; light; chain;
KW  complementarity determining region; CDR; variable; constant; region;
KW  monoclonal antibody; MAb; binding affinity; EDTA; DOTA; tumour; cancer;
KW  colorectal; breast; metal chelate; hapten; ss.
OS  Synthetic.
XX
PN  AU9350602-A.
XX
PD  26-MAY-1994.
XX
PF  10-NOV-1993; 93AU-00050602.
XX

```

Mon Oct 18 14:40:13 2004

```

1 12-NOV-1992; 92US-00975230.
2 (HYBR-) HYBRITECH INC.
3 Ahrweiler PM, Moore MD;
4 WPI; 1994-209063/26.
5 P-PSDB; AAR54165.
6 Polypeptide used in imaging and treatment of carcinomas and tumours -
7 comprising subunit antibody CDR having binding affinity for metal chelate
8 of EDTA or DETA or analogues.
9 Claim 25; Fig 3A; 6lpp; English.
10 The sequences given in AAQ68758-68 encode the wild type and mutagenised
11 versions of the complementarity determining region 3 (CDR3) of the
12 antibody designated CHA255. CHA255 is a murine monoclonal antibody (Mab)
13 which is capable of binding complexes. Mutagenesis of these CDRs, causes
14 the production of polypeptides with a particularly high binding affinity
15 for EDTA or DOTA metal complexes. CDR1 and -3 of the heavy chain, and
16 CDR2 and -3 of the light chain were targeted for mutagenesis. Five
17 residues of both CDR1 and -3 of the CHA255 heavy chain, five of seven
18 residues of light chain CDR and six of nine light chain CDR3 residues
19 were specifically targeted for codon-based mutagenesis. The mutagenised
20 Mab's can be used in compositions for in vivo imaging of malignant
21 tissues or tumours. They are also useful for the treatment of malignant
22 tissues or tumours eg. colorectal or breast cancer. Both methods involve
23 the use of radionuclides which bind to metal chelates or haptens which
24 are specifically delivered to the target site by a targeting molecule.
25 CDR derived peptides may be used to construct bi-functional antibodies
26 having dual specificities, or as donor or recipients of CDR sequences
27
28 Q Sequence 15 BP; 2 A; 3 C; 4 G; 6 T; 0 U; 0 Other;
29
30 Query Match 13.4%; Score 9.8; DB 1; Length 15;
31 Best Local Similarity 84.6%; Pred. No. 1.2e+03;
32 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
33
34 Y 942 CATCGGTTTATG 954
35 |||||
36 1 CATCGGTTTACTG 13
37
38 RESULT 1284
39 AAQ88369/c
40 ID AAQ88369 standard; DNA; 15 BP.
41 X
42 X AAQ88369;
43 X
44 X 18-DEC-1995 (first entry)
45 X
46 X Set of 15mer probes for CFTR gene analysis.
47 X
48 X Tiling strategy; immobilised nucleic acid probe array; CFTR gene;
49 X cystic fibrosis transmembrane conductance regulator; hybridisation;
50 X biological chip; interrogation position; ss.
51 X Synthetic.
52 X
53 X Key Location/Qualifiers
54 X misc_difference 9
55 X /tag= a
56 X /note= "N is A, T, C or G, i.e. the sequence represents a
57 X set of 4 probes"
58 X
59 X W09511995-A1.
60 X
61 X 04-MAY-1995.
62 X
63 X 26-OCT-1994; 94WO-US012305.
64 X
65 X 26-OCT-1993; 93US-00143312.
66 X
67 X 02-AUG-1994; 94US-00284064.
68 X
69 X (AFFY-) AFFYMAX TECHNOLOGIES NV.
70 X
71 X Chee M, Cronin MT, Fodor SP, Gingeras TR, Huang XC, Hubbell EA;
72 X Lipshutz RJ, Lobb PE, Miyada CG, Morris MS, Shah N, Sheldon EL;
73 X WPI; 1995-178887/23.
74 X
75 X
76 X
77 X
78 X
79 X
80 X
81 X
82 X
83 X
84 X
85 X
86 X
87 X
88 X
89 X
90 X
91 X
92 X
93 X
94 X
95 X
96 X
97 X
98 X
99 X
100 X
101 X
102 X
103 X
104 X
105 X
106 X
107 X
108 X
109 X
110 X
111 X
112 X
113 X
114 X
115 X
116 X
117 X
118 X
119 X
120 X
121 X
122 X
123 X
124 X
125 X
126 X
127 X
128 X
129 X
130 X
131 X
132 X
133 X
134 X
135 X
136 X
137 X
138 X
139 X
140 X
141 X
142 X
143 X
144 X
145 X
146 X
147 X
148 X
149 X
150 X
151 X
152 X
153 X
154 X
155 X
156 X
157 X
158 X
159 X
160 X
161 X
162 X
163 X
164 X
165 X
166 X
167 X
168 X
169 X
170 X
171 X
172 X
173 X
174 X
175 X
176 X
177 X
178 X
179 X
180 X
181 X
182 X
183 X
184 X
185 X
186 X
187 X
188 X
189 X
190 X
191 X
192 X
193 X
194 X
195 X
196 X
197 X
198 X
199 X
200 X
201 X
202 X
203 X
204 X
205 X
206 X
207 X
208 X
209 X
210 X
211 X
212 X
213 X
214 X
215 X
216 X
217 X
218 X
219 X
220 X
221 X
222 X
223 X
224 X
225 X
226 X
227 X
228 X
229 X
230 X
231 X
232 X
233 X
234 X
235 X
236 X
237 X
238 X
239 X
240 X
241 X
242 X
243 X
244 X
245 X
246 X
247 X
248 X
249 X
250 X
251 X
252 X
253 X
254 X
255 X
256 X
257 X
258 X
259 X
260 X
261 X
262 X
263 X
264 X
265 X
266 X
267 X
268 X
269 X
270 X
271 X
272 X
273 X
274 X
275 X
276 X
277 X
278 X
279 X
280 X
281 X
282 X
283 X
284 X
285 X
286 X
287 X
288 X
289 X
290 X
291 X
292 X
293 X
294 X
295 X
296 X
297 X
298 X
299 X
300 X
301 X
302 X
303 X
304 X
305 X
306 X
307 X
308 X
309 X
310 X
311 X
312 X
313 X
314 X
315 X
316 X
317 X
318 X
319 X
320 X
321 X
322 X
323 X
324 X
325 X
326 X
327 X
328 X
329 X
330 X
331 X
332 X
333 X
334 X
335 X
336 X
337 X
338 X
339 X
340 X
341 X
342 X
343 X
344 X
345 X
346 X
347 X
348 X
349 X
350 X
351 X
352 X
353 X
354 X
355 X
356 X
357 X
358 X
359 X
360 X
361 X
362 X
363 X
364 X
365 X
366 X
367 X
368 X
369 X
370 X
371 X
372 X
373 X
374 X
375 X
376 X
377 X
378 X
379 X
380 X
381 X
382 X
383 X
384 X
385 X
386 X
387 X
388 X
389 X
390 X
391 X
392 X
393 X
394 X
395 X
396 X
397 X
398 X
399 X
400 X
401 X
402 X
403 X
404 X
405 X
406 X
407 X
408 X
409 X
410 X
411 X
412 X
413 X
414 X
415 X
416 X
417 X
418 X
419 X
420 X
421 X
422 X
423 X
424 X
425 X
426 X
427 X
428 X
429 X
430 X
431 X
432 X
433 X
434 X
435 X
436 X
437 X
438 X
439 X
440 X
441 X
442 X
443 X
444 X
445 X
446 X
447 X
448 X
449 X
450 X
451 X
452 X
453 X
454 X
455 X
456 X
457 X
458 X
459 X
460 X
461 X
462 X
463 X
464 X
465 X
466 X
467 X
468 X
469 X
470 X
471 X
472 X
473 X
474 X
475 X
476 X
477 X
478 X
479 X
480 X
481 X
482 X
483 X
484 X
485 X
486 X
487 X
488 X
489 X
490 X
491 X
492 X
493 X
494 X
495 X
496 X
497 X
498 X
499 X
500 X
501 X
502 X
503 X
504 X
505 X
506 X
507 X
508 X
509 X
510 X
511 X
512 X
513 X
514 X
515 X
516 X
517 X
518 X
519 X
520 X
521 X
522 X
523 X
524 X
525 X
526 X
527 X
528 X
529 X
530 X
531 X
532 X
533 X
534 X
535 X
536 X
537 X
538 X
539 X
540 X
541 X
542 X
543 X
544 X
545 X
546 X
547 X
548 X
549 X
550 X
551 X
552 X
553 X
554 X
555 X
556 X
557 X
558 X
559 X
560 X
561 X
562 X
563 X
564 X
565 X
566 X
567 X
568 X
569 X
570 X
571 X
572 X
573 X
574 X
575 X
576 X
577 X
578 X
579 X
580 X
581 X
582 X
583 X
584 X
585 X
586 X
587 X
588 X
589 X
590 X
591 X
592 X
593 X
594 X
595 X
596 X
597 X
598 X
599 X
600 X
601 X
602 X
603 X
604 X
605 X
606 X
607 X
608 X
609 X
610 X
611 X
612 X
613 X
614 X
615 X
616 X
617 X
618 X
619 X
620 X
621 X
622 X
623 X
624 X
625 X
626 X
627 X
628 X
629 X
630 X
631 X
632 X
633 X
634 X
635 X
636 X
637 X
638 X
639 X
640 X
641 X
642 X
643 X
644 X
645 X
646 X
647 X
648 X
649 X
650 X
651 X
652 X
653 X
654 X
655 X
656 X
657 X
658 X
659 X
660 X
661 X
662 X
663 X
664 X
665 X
666 X
667 X
668 X
669 X
670 X
671 X
672 X
673 X
674 X
675 X
676 X
677 X
678 X
679 X
680 X
681 X
682 X
683 X
684 X
685 X
686 X
687 X
688 X
689 X
690 X
691 X
692 X
693 X
694 X
695 X
696 X
697 X
698 X
699 X
700 X
701 X
702 X
703 X
704 X
705 X
706 X
707 X
708 X
709 X
710 X
711 X
712 X
713 X
714 X
715 X
716 X
717 X
718 X
719 X
720 X
721 X
722 X
723 X
724 X
725 X
726 X
727 X
728 X
729 X
730 X
731 X
732 X
733 X
734 X
735 X
736 X
737 X
738 X
739 X
740 X
741 X
742 X
743 X
744 X
745 X
746 X
747 X
748 X
749 X
750 X
751 X
752 X
753 X
754 X
755 X
756 X
757 X
758 X
759 X
760 X
761 X
762 X
763 X
764 X
765 X
766 X
767 X
768 X
769 X
770 X
771 X
772 X
773 X
774 X
775 X
776 X
777 X
778 X
779 X
780 X
781 X
782 X
783 X
784 X
785 X
786 X
787 X
788 X
789 X
790 X
791 X
792 X
793 X
794 X
795 X
796 X
797 X
798 X
799 X
800 X
801 X
802 X
803 X
804 X
805 X
806 X
807 X
808 X
809 X
810 X
811 X
812 X
813 X
814 X
815 X
816 X
817 X
818 X
819 X
820 X
821 X
822 X
823 X
824 X
825 X
826 X
827 X
828 X
829 X
830 X
831 X
832 X
833 X
834 X
835 X
836 X
837 X
838 X
839 X
840 X
841 X
842 X
843 X
844 X
845 X
846 X
847 X
848 X
849 X
850 X
851 X
852 X
853 X
854 X
855 X
856 X
857 X
858 X
859 X
860 X
861 X
862 X
863 X
864 X
865 X
866 X
867 X
868 X
869 X
870 X
871 X
872 X
873 X
874 X
875 X
876 X
877 X
878 X
879 X
880 X
881 X
882 X
883 X
884 X
885 X
886 X
887 X
888 X
889 X
890 X
891 X
892 X
893 X
894 X
895 X
896 X
897 X
898 X
899 X
900 X
901 X
902 X
903 X
904 X
905 X
906 X
907 X
908 X
909 X
910 X
911 X
912 X
913 X
914 X
915 X
916 X
917 X
918 X
919 X
920 X
921 X
922 X
923 X
924 X
925 X
926 X
927 X
928 X
929 X
930 X
931 X
932 X
933 X
934 X
935 X
936 X
937 X
938 X
939 X
940 X
941 X
942 X
943 X
944 X
945 X
946 X
947 X
948 X
949 X
950 X
951 X
952 X
953 X
954 X
955 X
956 X
957 X
958 X
959 X
960 X
961 X
962 X
963 X
964 X
965 X
966 X
967 X
968 X
969 X
970 X
971 X
972 X
973 X
974 X
975 X
976 X
977 X
978 X
979 X
980 X
981 X
982 X
983 X
984 X
985 X
986 X
987 X
988 X
989 X
990 X
991 X
992 X
993 X
994 X
995 X
996 X
997 X
998 X
999 X
1000 X

```

PT New arrays of oligo:nucleotide probes - used for comparing known  
 PT sequences with variants for detection of mutation(s) and sequencing.  
 XX Claim 88; Page 154; 223pp; English.  
 PS  
 CC An array of oligonucleotide probes immobilised on a solid support (a  
 CC chip) comprises a set of probes chosen from sequences AAQ88361-Q88370.  
 CC Each probe comprises a segment of at least 3 nucleotides exactly  
 CC complementary to a subsequence of the CFTR gene, the segment including at  
 CC least one interrogation position complementary to a corresp. nucleotide  
 CC in the CFTR gene. The array also comprises three more probe sets which  
 CC each have sequences identical to the first set except at the  
 CC interrogation position. A target sequence can be analysed by determining  
 CC the extent of hybridisation at particular probes in the array  
 XX  
 SQ Sequence 15 BP; 9 A; 2 C; 3 G; 0 T; 0 U; 1 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 15;  
 Best Local Similarity 78.6%; Pred. No. 1.2e+03;  
 Matches 11; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 911 TCTTGTCTTTC 924  
 Db 15 TCTTGTCTTTC 2  
 RESULT 1286  
 ID AAT54336 standard; RNA; 15 BP.  
 AC AAT54336;  
 DT 25-MAR-2003 (revised)  
 DT 24-MAR-1997 (first entry)  
 DE Human IL-5 hammerhead ribozyme target sequence (nt. position 772).  
 KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;  
 KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;  
 KW intercellular adhesion molecule; rel A; tumour necrosis factor;  
 KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;  
 KW translocation; chronic myelogenous leukaemia; CML; cancer;  
 KW Philadelphia chromosome; inflammation; autoimmune disease;  
 KW atherosclerosis; myocardial infarction; stroke; restenosis;  
 KW transplant rejection; rheumatoid arthritis; psoriasis;  
 KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;  
 KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;  
 ss.  
 OS Homo sapiens.  
 XX  
 XX WO9523225-A2.  
 PD 31-AUG-1995.  
 XX  
 PF 23-FEB-1995; 95WO-IB000156.  
 XX  
 PR 23-FEB-1994; 94US-00201109.  
 PR 29-MAR-1994; 94US-00218934.  
 PR 04-APR-1994; 94US-00222795.  
 PR 07-APR-1994; 94US-00224483.  
 PR 15-APR-1994; 94US-00227958.  
 PR 19-APR-1994; 94US-00228041.  
 PR 18-MAY-1994; 94US-00245736.  
 PR 06-JUL-1994; 94US-00271280.  
 PR 15-AUG-1994; 94US-00291932.  
 PR 17-AUG-1994; 94US-00291433.  
 PR 19-AUG-1994; 94US-00292620.  
 PR 02-SEP-1994; 94US-00293520.  
 PR 08-SEP-1994; 94US-00300000.  
 PR 23-SEP-1994; 94US-00303039.  
 PR 23-SEP-1994; 94US-00311486.  
 PR 23-SEP-1994; 94US-00311749.

PR 28-SEP-1994; 94US-00314397.  
 PR 03-OCT-1994; 94US-00316771.  
 PR 07-OCT-1994; 94US-00319492.  
 PR 11-OCT-1994; 94US-00321993.  
 PR 04-NOV-1994; 94US-00334847.  
 PR 10-NOV-1994; 94US-00337608.  
 PR 28-NOV-1994; 94US-00337608.  
 PR 16-DEC-1994; 94US-00345516.  
 PR 23-DEC-1994; 94US-00357577.  
 PR 30-JAN-1995; 95US-00380734.  
 XX (RIBO-) RIBOZYME PHARM INC.  
 XX  
 XX Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;  
 PI Grimm S, Karpeisky A, Kislich K, Matulic-Adamic J, Meswiggen JA;  
 PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;  
 PI Tracz D, Usman N, Wincott FE, Woolf T;  
 XX WPI; 1995-351090/45.  
 DR  
 XX Ribozymes having modified bases and methods for producing them - for use  
 PT in inhibiting disease related genes.  
 XX  
 PS Claim 2; Page 215; 407pp; English.  
 CC The present sequence represents a preferred target sequence for an  
 CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-  
 CC 5) mRNA at the nucleotide base position indicated in the DE line. Regions  
 CC of the mRNA that do not form secondary folding structures and that  
 CC contain potential hammerhead and hairpin ribozyme cleavage sites were  
 CC identified by computer analysis. Ribozymes directed against these mRNA  
 CC sequences were designed and synthesised with modifications that improve  
 CC their nuclease resistance. The ribozymes cleave the IL-5 target sequences  
 CC and thereby inhibit IL-5 expression, making them useful for treating  
 CC chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes  
 CC and preventing the recruitment and activation of eosinophils. The  
 CC ribozymes can also be used to treat eosinophilia (related to parasitic  
 CC infection or with pulmonary infiltration) and L-tryptophan-associated  
 CC eosinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct PI  
 CC field.)  
 XX  
 SQ Sequence 15 BP; 5 A; 0 C; 1 G; 0 T; 9 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 15;  
 Best Local Similarity 30.8%; Pred. No. 1.2e+03;  
 Matches 4; Conservative 7; Mismatches 2; Indels 0; Gaps 0;  
 QY 943 ATTGGTTTAACTG 955  
 Db 1 AUUUAUUUAAUGU 13  
 RESULT 1287  
 ID AAT54220/c  
 AC AAT54220;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 24-MAR-1997 (first entry)  
 DE Human IL-5 hammerhead ribozyme target sequence (nt. position 380).  
 KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;  
 KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;  
 KW intercellular adhesion molecule; rel A; tumour necrosis factor;  
 KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;  
 KW translocation; chronic myelogenous leukaemia; CML; cancer;  
 KW Philadelphia chromosome; inflammation; autoimmune disease;  
 KW atherosclerosis; myocardial infarction; stroke; restenosis;  
 KW transplant rejection; rheumatoid arthritis; psoriasis;  
 KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;  
 KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;

I	ss.	943	ATTGGTTTAATGT	955
I				
I	Homo sapiens.		15	ATTGGTTTACTCT
I				
I	WO95232225-A2.			
I				
I	31-AUG-1995.			
I				
I	23-FEB-1995;			95WO-IB000156.
I				
I	23-FEB-1994;			94US-00201109.
I				94US-00218934.
I	23-MAR-1994;			94US-00222795.
I				94US-00224483.
I	04-APR-1994;			94US-00227958.
I				94US-00228041.
I	07-APR-1994;			94US-00245736.
I				94US-00271280.
I	15-APR-1994;			94US-00291932.
I				94US-00291433.
I	18-MAY-1994;			94US-00292620.
I				94US-00293520.
I	16-AUG-1994;			94US-00300000.
I				94US-00303039.
I	17-AUG-1994;			94US-00311486.
I				94US-00311749.
I	23-SEP-1994;			94US-00314397.
I				94US-00316771.
I	03-OCT-1994;			94US-00319492.
I				94US-00321993.
I	07-OCT-1994;			94US-00334847.
I				94US-00337608.
I	10-NOV-1994;			94US-00345516.
I				94US-00357577.
I	28-NOV-1994;			94US-00363233.
I				94US-00380734.
I	30-JAN-1995;			95WO-IB000156.
I				
I	(RIBO-) RIBOZYME PHARM INC.			
I				
I	Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;			
I	Grimm S, Karpeisky A, Kisch K, Matulic-Adamic J, Mcswiggen JA;			
I	Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;			
I	Tracz D, Usman N, Wincott FE, Woolf T;			
I				
I	WPI; 1995-351090/45.			
I				
I	Ribozymes having modified bases and methods for producing them - for use			
I	in inhibiting disease related genes.			
I				
I	Claim 2; Page 214; 407pp; English.			
I				
I	The present sequence represents a preferred target sequence for an			
I	enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-			
I	5) mRNA at the nucleotide base position indicated in the DE line. Regions			
I	of the mRNA that do not form secondary folding structures and that			
I	contain potential hammerhead and hairpin ribozyme cleavage sites were			
I	identified by computer analysis. Ribozymes directed against these mRNA			
I	sequences were designed and synthesised with modifications that improve			
I	their nuclease resistance. The ribozymes cleave the IL-5 target sequences			
I	and thereby inhibit IL-5 expression, making them useful for treating			
I	chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes			
I	and preventing the recruitment and activation of eosinophils. The			
I	ribozymes can also be used to treat eosinophilia (related to parasitic			
I	infection or with pulmonary infiltration) and L-tryptophan-associated			
I	eosinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct PI			
I	field.)			
I				
I	Sequence 15 BP; 7 A; 2 C; 4 G; 0 T; 0 U; 0 Other;			
I				
I	Query Match 13.4%; Score 9.8; DB 1; Length 15;			
I	Best Local Similarity 84.6%; Pred. NO. 1.2e+03;			
I	Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;			

```

PT in inhibiting disease related genes.
XX Claim 2; Page 241; 407pp; English.
XX
CC The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves TNF-alpha mRNA at
CC the nucleotide base position indicated in the DE line. Regions of the
CC mRNA that do not form secondary folding structures and that contain
CC potential hammerhead and hairpin ribozyme cleavage sites were identified
CC by computer analysis. Ribozymes directed against these mRNA sequences
CC were designed and synthesised with modifications that improve their
CC nuclease resistance. The ribozymes are designed to cleave the target
CC sequences and thereby inhibit TNF-alpha expression, making them
CC potentially useful for treating rheumatoid arthritis, septic shock and
CC other inflammatory disorders including psoriasis, as well as for
CC treatment of AIDS. (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ Sequence 15 BP; 2 A; 5 C; 4 G; 0 T; 4 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 15;
PS Best Local Similarity 53.8%; Pred. No. 1.2e+03;
Matches 7; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY 935 TCCTCTTCATTGG 947
Db :||:|:|:| ||
2 UCCUCUUCACGG 14

RESULT 1289
AAT54238
ID AAT54238 standard; RNA; 15 BP.
AC AAT54238;
XX
AC AAT54238;
XX
DT 25-MAR-2003 (revised)
DT 24-MAR-1997 (first entry)
XX
DE Human IL-5 hammerhead ribozyme target sequence (nt. position 419).
XX
KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rei A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; stroke; restenosis;
KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW ss.
OS Homo sapiens.
XX
XX WO9523225-A2.
XX
PD 31-AUG-1995.
XX
PF 23-FEB-1995; 95WO-IB000156.
XX
PR 23-FEB-1994; 94US-00201109.
PR 29-MAR-1994; 94US-00218934.
PR 04-APR-1994; 94US-00222795.
PR 07-APR-1994; 94US-00224483.
PR 15-APR-1994; 94US-00227958.
PR 15-APR-1994; 94US-00228041.
PR 18-MAY-1994; 94US-00245736.
PR 06-JUL-1994; 94US-00271280.
PR 15-AUG-1994; 94US-00291932.
PR 16-AUG-1994; 94US-00291433.
PR 17-AUG-1994; 94US-00292620.
PR 19-AUG-1994; 94US-00293520.
PR 02-SEP-1994; 94US-00300000.
PR 08-SEP-1994; 94US-00303039.
XX

PR 23-SEP-1994; 94US-00311486.
PR 23-SEP-1994; 94US-00311749.
PR 28-SEP-1994; 94US-00314397.
PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, McSwiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott PE, Woolf T;
XX
XX WPI; 1995-351090/45.
XX
PT Ribozymes having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
XX
XX Claim 2; Page 214; 407pp; English.
XX
CC The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-
CC 5) mRNA at the nucleotide base position indicated in the DE line. Regions
CC of the mRNA that do not form secondary folding structures and that
CC contain potential hammerhead and hairpin ribozyme cleavage sites were
CC identified by computer analysis. Ribozymes directed against these mRNA
CC sequences were designed and synthesised with modifications that improve
CC their nuclease resistance. The ribozymes cleave the IL-5 target sequences
CC and thereby inhibit IL-5 expression, making them useful for treating
CC chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes
CC and preventing the recruitment and activation of eosinophils. The
CC ribozymes can also be used to treat eosinophilia (related to parasitic
CC infection or with pulmonary infiltration) and L-tryptophan-associated
CC eosinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct PI
CC field.)
XX
SQ Sequence 15 BP; 5 A; 1 C; 4 G; 0 T; 5 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 15;
PS Best Local Similarity 46.2%; Pred. No. 1.2e+03;
Matches 6; Conservative 5; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGGTTTATGTA 956
Db :||:|:|:| ||
1 UUGGUGUAAUGAA 13

RESULT 1290
AAT54618
ID AAT54618 standard; RNA; 15 BP.
XX
AC AAT54618;
XX
DT 25-MAR-2003 (revised)
DT 22-APR-1997 (first entry)
XX
DE Mouse IL-5 hammerhead ribozyme target sequence (nt. position 825).
XX
KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rei A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;

```

1 myocardial ischaemia; Kawasaki disease; septic shock; HIV;  
4 human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;  
ss.

3 Mus musculus.

N WO95232225-A2.

D 31-AUG-1995.

F 23-FEB-1995; 95WO-IB000156.

X 23-FEB-1994; 94US-00201109.

R 29-MAR-1994; 94US-00218934.

R 04-APR-1994; 94US-00222795.

R 07-APR-1994; 94US-00224483.

R 15-APR-1994; 94US-00227958.

R 15-APR-1994; 94US-00228041.

R 18-MAY-1994; 94US-00245736.

R 06-JUL-1994; 94US-00271280.

R 15-AUG-1994; 94US-00291932.

R 16-AUG-1994; 94US-00291433.

R 17-AUG-1994; 94US-00292620.

R 19-AUG-1994; 94US-00293520.

R 02-SEP-1994; 94US-00300000.

R 08-SEP-1994; 94US-00303039.

R 23-SEP-1994; 94US-00311486.

R 23-SEP-1994; 94US-00311749.

R 28-SEP-1994; 94US-00314397.

R 03-OCT-1994; 94US-00316771.

R 07-OCT-1994; 94US-00319492.

R 11-OCT-1994; 94US-00321993.

R 04-NOV-1994; 94US-00334847.

R 10-NOV-1994; 94US-00337608.

R 28-NOV-1994; 94US-00345516.

R 16-DEC-1994; 94US-00357577.

R 23-DEC-1994; 94US-00363233.

R 30-JAN-1995; 95US-00380734.

X (RIBO-) RIBOZYME PHARM INC.

Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;

Grimm S, Karpeisky A, Kisch K, Matulic-Adamic J, McSwiggen JA;

Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;

Tracz D, Usman N, Wincott FE, Woolf T;

WPI; 1995-351090/45.

Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.

Matches 8; Conservative 3; Mismatches 2; Indels 0; Gaps 0;  
Qy 931 TCCTCTCTCTCA 943  
Db 3 UCCUCCCCCUCA 15

RESULT 1291

AA51949/c

ID AAT51949 standard; RNA; 15 BP.

XX AC AAT51949;

XX DT 25-MAR-2003 (revised)

DT 18-MAR-1997 (first entry)

XX Human ICAM hammerhead ribozyme target sequence (nt. position 1294).

Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;

gene expression; downregulation; interleukin-5; IL-5; ICAM-1;

intercellular adhesion molecule; rel A; tumour necrosis factor;

TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;

translocation; chronic myelogenous leukaemia; CML; cancer;

Philadelphia chromosome; inflammation; autoimmune disease;

atherosclerosis; myocardial infarction; stroke; psoriasis;

transplant rejection; rheumatoid arthritis; septic shock; HIV;

myocardial ischaemia; Kawasaki disease; acquired immune deficiency syndrome; AIDS;

human immunodeficiency virus; ss.

XX Homo sapiens.

XX OS WO95232225-A2.

XX PN 31-AUG-1995.

XX PD 23-FEB-1995; 95WO-IB000156.

XX PR 23-FEB-1994; 94US-00201109.

XX PR 29-MAR-1994; 94US-00218934.

XX PR 04-APR-1994; 94US-00222795.

XX PR 07-APR-1994; 94US-00224483.

XX PR 15-APR-1994; 94US-00227958.

XX PR 15-APR-1994; 94US-00228041.

XX PR 16-MAY-1994; 94US-00245736.

XX PR 06-JUL-1994; 94US-00271280.

XX PR 15-AUG-1994; 94US-00291932.

XX PR 16-AUG-1994; 94US-00291433.

XX PR 17-AUG-1994; 94US-00292620.

XX PR 19-AUG-1994; 94US-00293520.

XX PR 02-SEP-1994; 94US-00300000.

XX PR 08-SEP-1994; 94US-00303039.

XX PR 23-SEP-1994; 94US-00311486.

XX PR 23-SEP-1994; 94US-00311749.

XX PR 28-SEP-1994; 94US-00314397.

XX PR 03-OCT-1994; 94US-00316771.

XX PR 11-OCT-1994; 94US-00319492.

XX PR 04-NOV-1994; 94US-00334847.

XX PR 10-NOV-1994; 94US-00337608.

XX PR 28-NOV-1994; 94US-00345516.

XX PR 16-DEC-1994; 94US-00357577.

XX PR 23-DEC-1994; 94US-00363233.

XX PR 30-JAN-1995; 95US-00380734.

XX (RIBO-) RIBOZYME PHARM INC.

PA Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;

PI Grimm S, Karpeisky A, Kisch K, Matulic-Adamic J, McSwiggen JA;

PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;

PI Tracz D, Usman N, Wincott FE, Woolf T;

XX WPI; 1995-351090/45.

DR

XX Ribozymes having modified bases and methods for producing them - for use  
 PT in inhibiting disease related genes.  
 XX  
 PS Claim 2; Page 173; 407pp; English.  
 XX  
 CC The present sequence represents a preferred target sequence for an  
 CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the  
 CC nucleotide base position indicated in the DE line. Regions of the mRNA  
 CC that do not form secondary folding structures and that contain potential  
 CC hammerhead and hairpin ribozyme cleavage sites were identified by  
 CC computer analysis. Ribozymes directed against these mRNA sequences were  
 CC designed and synthesised with modifications that improve their nuclease  
 CC resistance. The ribozymes cleave the ICAM-1 target sequences and thereby  
 CC inhibit ICAM-1 expression, making them useful for reducing transplant  
 CC rejection and alleviating symptoms in patients with rheumatoid arthritis,  
 CC asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to  
 CC correct PI field.)  
 XX  
 SQ Sequence 15 BP; 7 A; 4 C; 2 G; 0 T; 2 U; 0 Other;  
  
 Query Match 13.4%; Score 9.8; DB 1; Length 15;  
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
 QY 901 CTGGTCATTTCCT 913  
 DB |||| |||||  
 13 CTGGGAATTTCT 1  
  
 RESULT 1292  
 AAT52087/c  
 ID AAT52087 standard; RNA; 15 BP.  
 XX  
 AC AAT52087;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 24-MAR-1997 (first entry)  
 XX  
 DE Human ICAM hammerhead ribozyme target sequence (nt. position 2479).  
 DE  
 KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;  
 KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;  
 KW intercellular adhesion molecule; rel A; tumour necrosis factor;  
 KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;  
 KW translocation; chronic myelogenous leukaemia; CML; cancer;  
 KW Philadelphia chromosome; inflammation; autoimmune disease;  
 KW atherosclerosis; myocardial infarction; stroke; restenosis;  
 KW transplant rejection; rheumatoid arthritis; psoriasis;  
 KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;  
 KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;  
 KW ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO9523225-A2.  
 XX  
 PD 31-AUG-1995.  
 XX  
 PF 23-FEB-1995; 95WO-IB000156.  
 XX  
 PR 23-FEB-1994; 94US-00201109.  
 PR 29-MAR-1994; 94US-00218934.  
 PR 04-APR-1994; 94US-00222795.  
 PR 07-APR-1994; 94US-00224483.  
 PR 15-APR-1994; 94US-00227958.  
 PR 15-APR-1994; 94US-00228041.  
 PR 18-MAY-1994; 94US-00245736.  
 PR 06-JUL-1994; 94US-00271280.  
 PR 15-AUG-1994; 94US-00291932.  
 PR 16-AUG-1994; 94US-00291433.  
 PR 17-AUG-1994; 94US-00292620.  
 PR 19-AUG-1994; 94US-00293520.

human immunodeficiency virus; acquired immune deficiency syndrome; AIDS; ss.

Homo sapiens.

WO9523225-A2.

31-AUG-1995.

23-FEB-1995; 95WO-IB000156.

23-FEB-1994; 94US-00201109.

23-MAR-1994; 94US-00218934.

04-APR-1994; 94US-00222795.

07-APR-1994; 94US-00224483.

15-APR-1994; 94US-00227958.

18-MAY-1994; 94US-00228041.

18-MAY-1994; 94US-00245736.

06-JUL-1994; 94US-00271280.

15-AUG-1994; 94US-00291433.

16-AUG-1994; 94US-00292620.

17-AUG-1994; 94US-00293520.

19-AUG-1994; 94US-00300000.

02-SEP-1994; 94US-00303039.

08-SEP-1994; 94US-00311486.

23-SEP-1994; 94US-00311749.

28-SEP-1994; 94US-00314397.

03-OCT-1994; 94US-00316771.

11-OCT-1994; 94US-00321993.

04-NOV-1994; 94US-00334847.

10-NOV-1994; 94US-00337608.

28-NOV-1994; 94US-00345516.

16-DEC-1994; 94US-00357577.

23-DEC-1994; 94US-00363233.

30-JAN-1995; 95US-00380734.

(RIBO-) RIBOZYME PHARM INC.

Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW; Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, McSwiggan JA; Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD; Tracz D, Usman N, Wincott FE, Woolf T; WPI; 1995-351090/45.

Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.

Claim 2; Page 215; 407pp; English.

The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-5) mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the IL-5 target sequences and thereby inhibit IL-5 expression, making them useful for treating chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes and preventing the recruitment and activation of eosinophils. The ribozymes can also be used to treat eosinophilia (related to parasitic infection or with pulmonary infiltration) and L-tryptophan-associated eosinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct PI field.)

Sequence 15 BP; 4 A; 0 C; 1 G; 0 T; 10 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 15;

Best Local Similarity 30.8%; Pred. No. 1.2e+03;

Matches 4; Conservative 7; Mismatches 2; Indels 0; Gaps 0;

QY 943 ATTGGTTAATGT 955

Db 2 AUUUAUUUAUGU 14

RESULT 1294

AAT54620

ID AAT54620 standard; RNA; 15 BP.

XX AC AAT54620;

XX DT 25-MAR-2003 (revised)

DT 22-APR-1997 (first entry)

XX DE Mouse IL-5 hammerhead ribozyme target sequence (nt. position 825).

XX KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;

KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;

KW intercellular adhesion molecule; rel A; tumour necrosis factor;

KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;

KW translocation; chronic myelogenous leukaemia; CML; cancer;

KW Philadelphia chromosome; inflammation; autoimmune disease;

KW atherosclerosis; myocardial infarction; stroke; restenosis;

KW transplant rejection; rheumatoid arthritis; psoriasis;

KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;

KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;

SS.

OS Mus musculus.

XX WO9523225-A2.

XX PD 31-AUG-1995.

XX PF 23-FEB-1995; 95WO-IB000156.

XX PR 23-FEB-1994; 94US-00201109.

PR 23-MAR-1994; 94US-00218934.

PR 04-APR-1994; 94US-00222795.

PR 07-APR-1994; 94US-00224483.

PR 15-APR-1994; 94US-00227958.

PR 18-MAY-1994; 94US-00228041.

PR 06-JUL-1994; 94US-00245736.

PR 15-AUG-1994; 94US-00271280.

PR 16-AUG-1994; 94US-00291433.

PR 17-AUG-1994; 94US-00292620.

PR 19-AUG-1994; 94US-00293520.

PR 02-SEP-1994; 94US-00300000.

PR 08-SEP-1994; 94US-00303039.

PR 23-SEP-1994; 94US-00311486.

PR 23-SEP-1994; 94US-00311749.

PR 28-SEP-1994; 94US-00314397.

PR 03-OCT-1994; 94US-00316771.

PR 11-OCT-1994; 94US-00321993.

PR 04-NOV-1994; 94US-00334847.

PR 10-NOV-1994; 94US-00337608.

PR 28-NOV-1994; 94US-00345516.

PR 16-DEC-1994; 94US-00357577.

PR 23-DEC-1994; 94US-00363233.

PR 30-JAN-1995; 95US-00380734.

XX (RIBO-) RIBOZYME PHARM INC.

PA Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW; PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, McSwiggan JA; PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD; PI Tracz D, Usman N, Wincott FE, Woolf T; XX WPI; 1995-351090/45.



PT Ribozymes having modified bases and methods for producing them - for use  
 PT in inhibiting disease related genes.

PS Claim 2; Page 221; 407pp; English.

XX The present sequence represents a preferred target sequence for an  
 CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-  
 CC 5) mRNA at the nucleotide base position indicated in the DE line. Regions  
 CC of the mRNA that do not form secondary folding structures and that  
 CC contain potential hammerhead and hairpin ribozyme cleavage sites were  
 CC identified by computer analysis. Ribozymes directed against these mRNA  
 CC sequences were designed and synthesised with modifications that improve  
 CC their nuclease resistance. The ribozymes cleave the IL-5 target sequences  
 CC and thereby inhibit IL-5 expression, making them useful for treating  
 CC chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes  
 CC and preventing the recruitment and activation of eosinophils. The  
 CC ribozymes can also be used to treat eosinophilia (related to parasitic  
 CC infection or with pulmonary infiltration) and L-tryptophan-associated  
 CC eosinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct PI  
 CC field.)

SQ Sequence 15 BP; 2 A; 10 C; 0 G; 0 T; 3 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 15;

Best Local Similarity 61.5%; Pred. No. 1.2e+03;

Matches 8; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

QY 931 TCCTCTCTTCA 943

Db :|||:|:|:|

3 UCCUCCUCCUCCA 15

RESULT 1295

AAT55666

ID AAT55666 standard; RNA; 15 BP.

XX AAT55666;

XX 25-MAR-2003 (revised)

DT 21-MAR-1997 (first entry)

XX Human TNF-alpha hammerhead ribozyme target sequence (nt position 505).

XX Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;  
 XX gene expression; downregulation; interleukin-5; IL-5; ICAM-1;  
 XX intercellular adhesion molecule; rel A; tumour necrosis factor;  
 XX TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;  
 XX translocation; chronic myelogenous leukaemia; CML; cancer;  
 XX Philadelphia chromosome; inflammation; autoimmune disease;  
 XX atherosclerosis; myocardial infarction; stroke; restenosis;  
 XX transplant rejection; rheumatoid arthritis; psoriasis;  
 XX myocardial ischaemia; Kawasaki disease; septic shock; HIV;  
 XX human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;  
 XX ss.

XX Homo sapiens.

OS W09523225-A2.

FN 31-AUG-1995.

PD 23-FEB-1995; 95WO-IB000156.

XX 23-FEB-1994; 94US-00201109.

PR 29-MAR-1994; 94US-00218934.

PR 04-APR-1994; 94US-0022795.

PR 07-APR-1994; 94US-00224483.

PR 15-APR-1994; 94US-00227958.

PR 15-APR-1994; 94US-00228041.

PR 18-MAY-1994; 94US-00245736.

PR 06-JUL-1994; 94US-00271280.

PR 15-AUG-1994; 94US-00291932.

PR 16-AUG-1994; 94US-00291433.

PR 17-AUG-1994; 94US-00292620.

PR 19-AUG-1994; 94US-00293520.

PR 02-SEP-1994; 94US-00300000.

PR 08-SEP-1994; 94US-00303039.

PR 23-SEP-1994; 94US-00311486.

PR 23-SEP-1994; 94US-00311749.

PR 28-SEP-1994; 94US-00314397.

PR 03-OCT-1994; 94US-00316771.

PR 07-OCT-1994; 94US-00319492.

PR 11-OCT-1994; 94US-00321993.

PR 04-NOV-1994; 94US-00334847.

PR 10-NOV-1994; 94US-00337608.

PR 28-NOV-1994; 94US-00345516.

PR 16-DEC-1994; 94US-00357577.

PR 23-DEC-1994; 94US-00363233.

PR 30-JAN-1995; 95US-00380734.

XX (RIBO-) RIBOZYME PHARM INC.

XX Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;

PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;

PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;

PI Tracz D, Usman N, Wincott FE, Woolf T;

XX WPI; 1995-351090/45.

XX Ribozymes having modified bases and methods for producing them - for use  
 PT in inhibiting disease related genes.

XX Claim 2; Page 241; 407pp; English.

CC The present sequence represents a preferred target sequence for an  
 CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves TNF-alpha mRNA at  
 CC the nucleotide base position indicated in the DE line. Regions of the  
 CC mRNA that do not form secondary folding structures and that contain  
 CC potential hammerhead and hairpin ribozyme cleavage sites were identified  
 CC by computer analysis. Ribozymes directed against these mRNA sequences  
 CC were designed and synthesised with modifications that improve their  
 CC nuclease resistance. The ribozymes are designed to cleave the target  
 CC sequences and thereby inhibit TNF-alpha expression, making them  
 CC potentially useful for treating rheumatoid arthritis, septic shock and  
 CC other inflammatory disorders including psoriasis, as well as for  
 CC treatment of AIDS. (Updated on 25-MAR-2003 to correct PI field.)

SQ Sequence 15 BP; 2 A; 6 C; 3 G; 0 T; 4 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 15;

Best Local Similarity 53.8%; Pred. No. 1.2e+03;

Matches 7; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY 935 TCCTCTTCATTGG 947

Db :|||:|:|:|

1 UCCUCCUCCAAGGG 13

RESULT 1296

AAT52089/c

ID AAT52089 standard; RNA; 15 BP.

XX AAT52089;

XX 25-MAR-2003 (revised)

DT 24-MAR-1997 (first entry)

XX Human ICAM hammerhead ribozyme target sequence (nt. position 2480).

XX Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;  
 XX gene expression; downregulation; interleukin-5; IL-5; ICAM-1;  
 XX intercellular adhesion molecule; rel A; tumour necrosis factor;  
 XX TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;  
 XX translocation; chronic myelogenous leukaemia; CML; cancer;  
 XX Philadelphia chromosome; inflammation; autoimmune disease;  
 XX atherosclerosis; myocardial infarction; stroke; restenosis;

transplant rejection; rheumatoid arthritis; psoriasis;  
myocardial ischaemia; Kawasaki disease; septic shock; HIV;  
human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;  
ss.  
X Homo sapiens.  
X WO95232225-A2.  
X 31-AUG-1995.  
X 23-FEB-1995; 95WO-IB000156.  
X 23-FEB-1994; 94US-00201109.  
X 23-MAR-1994; 94US-00218934.  
X 04-APR-1994; 94US-00222795.  
X 07-APR-1994; 94US-00224483.  
X 15-APR-1994; 94US-00227958.  
X 15-APR-1994; 94US-00228041.  
X 18-MAY-1994; 94US-00245736.  
X 06-JUL-1994; 94US-00271280.  
X 15-AUG-1994; 94US-00291932.  
X 16-AUG-1994; 94US-00291433.  
X 17-AUG-1994; 94US-00292620.  
X 19-AUG-1994; 94US-00293520.  
X 02-SEP-1994; 94US-00300000.  
X 08-SEP-1994; 94US-00303039.  
X 23-SEP-1994; 94US-00311486.  
X 23-SEP-1994; 94US-00311749.  
X 28-SEP-1994; 94US-00314397.  
X 03-OCT-1994; 94US-00316771.  
X 07-OCT-1994; 94US-00319492.  
X 11-OCT-1994; 94US-00321993.  
X 04-NOV-1994; 94US-00334847.  
X 10-NOV-1994; 94US-00337608.  
X 28-NOV-1994; 94US-00345516.  
X 16-DEC-1994; 94US-00357577.  
X 23-DEC-1994; 94US-00363233.  
X 30-JAN-1995; 95US-00380734.  
(RIBO-) RIBOZYME PHARM INC.  
Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;  
Grimm S, Karpeisky A, Kisch K, Matulic-Adamic J, Meswigen JA;  
Modak A, Pavco P, Beigelman L, Sullivan SM, Sweedler D, Thompson JD;  
Tracz D, Usman N, Wincott FE, Woolf T;  
WPI; 1995-351090/45.  
Ribozymes having modified bases and methods for producing them - for use  
in inhibiting disease related genes.  
Claim 2; Page 175; 407pp; English.  
The present sequence represents a preferred target sequence for an  
enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the  
nucleotide base position indicated in the DE line. Regions of the mRNA  
that do not form secondary folding structures and that contain potential  
hammerhead and hairpin ribozyme cleavage sites were identified by  
computer analysis. Ribozymes directed against these mRNA sequences were  
designed and synthesised with modifications that improve their nuclease  
resistance. The ribozymes cleave the ICAM-1 target sequences and thereby  
inhibit ICAM-1 expression, making them useful for reducing transplant  
rejection and alleviating symptoms in patients with rheumatoid arthritis,  
asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to  
correct PI field.)  
Sequence 15 BP; 3 A; 5 C; 2 G; 0 T; 5 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 15;  
Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 959 GCTACCAACGGTG 971  
|||||  
Db 14 GCTAACAAAGGTG 2  
RESULT 1297  
AAAX66317  
ID AAX66317 standard; RNA; 15 BP.  
XX  
AC AAX66317;  
XX  
DT 20-JUL-1999 (first entry)  
XX Mouse B7-2 hammerhead ribozyme target SEQ ID NO:2949.  
DE  
XX Arthritic condition; graft tolerance; immune response; target; cleavage;  
XX hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;  
KW stromelysin; synovial membrane; joint; arthritis; osteoarthritis;  
KW rheumatoid arthritis; autoimmune disease; allergy; inflammation;  
KW diagnosis; ss.  
XX Mus sp.  
OS  
PN WO9618736-A2.  
XX  
PD 20-JUN-1996.  
XX  
PF 22-NOV-1995; 95WO-US015516.  
XX  
PR 13-DEC-1994; 94US-00354920.  
PR 23-DEC-1994; 94US-00363253.  
PR 23-DEC-1994; 94US-00363254.  
PR 17-FEB-1995; 95US-00390850.  
PR 20-APR-1995; 95US-00426124.  
PR 02-MAY-1995; 95US-00432874.  
PR 04-MAY-1995; 95US-00434509.  
PR 07-JUL-1995; 95US-0000951P.  
PR 07-JUL-1995; 95US-0000974P.  
PR 07-AUG-1995; 95US-00512861.  
PR 05-OCT-1995; 95US-00541365.  
XX  
FA (RIBO-) RIBOZYME PHARM INC.  
XX Beigelman L, Stinchcomb DT, Jarvis T, Draper K, Pavco P;  
PI Meswigen J, Gustofson J, Usman N, Wincott F, Matulic-Adamic J;  
PI Karpeisky A, Thompson JD, Modak A, Burgin A;  
XX  
DR WPI; 1996-300653/30.  
XX  
PT Enzymatic nucleic acid molecules having a hammer-head motif - used for  
PT the treatment of arthritis, induction of graft tolerance or treatment of  
PT auto-immune diseases.  
XX  
PS Claim 10; Page 198; 307pp; English.  
XX  
CC The present invention describes a novel enzymatic nucleic acid (ENA)  
CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues  
CC ; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least  
CC ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's  
CC can inhibit collagenase and stromelysin production in the synovial  
CC membrane of joints for the treatment or prevention of arthritis,  
CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also  
CC be used to treat antigen presenting cells of a donor to induce tolerance  
CC in a recipient to an alloantigen of a donor. They can also be used for  
CC enhancing graft tolerance or for treating autoimmune disease, and for  
CC treating allergies and other inflammatory conditions. The ENA's can also  
CC be used in diagnosis. Ribozyme therapy impacts on the expression of  
CC stromelysin without introducing the non-specific effects upon gene  
CC expression which accompany treatment with retinoids and dexamethasone.  
CC The concentration of ribozyme required to affect a therapeutic treatment  
CC is lower than that required of antisense molecules, and is highly  
CC specific. The present sequence is used in the exemplification of the  
CC present invention

XX SQ Sequence 15 BP; 2 A; 4 C; 3 G; 0 T; 6 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 15;  
 Best Local Similarity 46.2%; Pred. No. 1.2e+03;  
 Matches 6; Conservative 5; Mismatches 2; Indels 0; Gaps 0;  
 QY 934 CTCCTCTTCATTG 946  
 |:|:|:|:|:|:|  
 Db 3 CUGCUCAUCAUG 15

RESULT 1299  
 ID AAX66254/c RNA; 15 BP.  
 XX AAX66254;  
 XX  
 DT 20-JUL-1999 (first entry)  
 DE Mouse B7-2 hammerhead ribozyme target SEQ ID NO:2886.  
 XX  
 KW Arthritic condition; graft tolerance; immune response; target; cleavage;  
 KW hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;  
 KW stromelysin; synovial membrane; joint; arthritis; osteoarthritis;  
 KW rheumatoid arthritis; autoimmune disease; allergy; inflammation;  
 KW diagnosis; ss.  
 XX  
 OS Mus sp.  
 XX  
 PN WO9618736-A2.  
 XX  
 PD 20-JUN-1996.  
 XX  
 PF 22-NOV-1995; 95WO-US015516.  
 XX  
 PR 13-DEC-1994; 94US-00354920.  
 PR 23-DEC-1994; 94US-00363253.  
 PR 23-DEC-1994; 94US-00363254.  
 PR 17-FEB-1995; 95US-00390850.  
 PR 20-APR-1995; 95US-00426124.  
 PR 02-MAY-1995; 95US-00432874.  
 PR 04-MAY-1995; 95US-00434509.  
 PR 07-JUL-1995; 95US-0000951P.  
 PR 07-JUL-1995; 95US-0000974P.  
 PR 07-AUG-1995; 95US-00512861.  
 PR 05-OCT-1995; 95US-00541365.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Beigelman L, Stinchcomb DT, Jarvis T, Draper K, Pavco P;  
 PI Mcswiggen J, Gustofson J, Usman N, Wincott F, Matulic-Adamic J;  
 PI Karpeisky A, Thompson JD, Modak A, Burgin A;  
 XX  
 DR WPI; 1996-300653/30.  
 XX  
 PT Enzymatic nucleic acid molecules having a hammer-head motif - used for  
 PT the treatment of arthritis, induction of graft tolerance or treatment of  
 PT auto-immune diseases.  
 XX  
 PS Claim 10; Page 197; 307pp; English.  
 XX

The present invention describes a novel enzymatic nucleic acid (ENA) having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least ten 2', O-methyl modifications; and (iv) a 3'-end modification. The ENA's can inhibit collagenase and stromelysin production in the synovial membrane of joints for the treatment or prevention of arthritis, particularly osteoarthritis or rheumatoid arthritis. The ENA's can also be used to treat antigen presenting cells of a donor to induce tolerance in a recipient to an alloantigen of a donor. They can also be used for enhancing graft tolerance or for treating autoimmune disease, and for treating allergies and other inflammatory conditions. The ENA's can also

CC be used in diagnosis. Ribozyme therapy impacts on the expression of stromelysin without introducing the non-specific effects upon gene expression which accompany treatment with retinoids and dexamethasone. The concentration of ribozyme required to affect a therapeutic treatment is lower than that required of antisense molecules, and is highly specific. The present sequence is used in the exemplification of the present invention  
 CC  
 XX SQ Sequence 15 BP; 8 A; 2 C; 3 G; 0 T; 2 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 15;  
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 938 TCTTCATTGGTTT 950  
 ||||| |||||  
 Db 14 TCTTCTTAGGTTT 2

RESULT 1299  
 AAT49863  
 ID AAT49863 standard; RNA; 15 BP.  
 XX  
 AC AAT49863;  
 XX  
 DT 07-MAR-1997 (first entry)  
 XX  
 DE Human CETP HH ribozyme target sequence #1564.  
 XX  
 KW Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage;  
 KW neutral lipid transfer; plasma lipoprotein; atherosclerosis; athrectomy;  
 KW reverse cholesterol transport; high density lipoprotein; therapy; CETP;  
 KW familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;  
 KW peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;  
 KW angioplastic restenosis; low density lipoprotein; diabetes; HDL; human;  
 KW LDL; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO9620279-A1.  
 XX  
 PD 04-JUL-1996.  
 XX  
 PF 11-DEC-1995; 95WO-US016000.  
 XX  
 PR 23-DEC-1994; 94US-00363240.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 PA (WARN ) WARNER LAMBERT CO.  
 XX  
 PI Couture L, Stinchcomb D, Mcswiggen J, Bisgaier C, Page M;  
 PI WPI; 1996-321852/32.  
 XX  
 PT New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA -  
 PT useful for preventing or treating initial development, progression or  
 PT regression of vascular diseases, esp. familial hypercholesterolaemia.  
 XX  
 PS Claim 4; Page 33; 72pp; English.  
 XX

AAT49608-749863 represent target sequences for the human cholesterol ester transfer protein (CETP) hammerhead (HH) ribozymes (see AAT49881-750137). CETP is a 74 kD glycoprotein that facilitates neutral lipid transfer between plasma lipoproteins. The numbering of the targets refers to the position of the cleavage site in full length CETP. The ribozyme binds to 5 nucleotides either side of this site, provided the sequence UH is immediately upstream. The ribozymes are able to cleave mRNA from the gene encoding CETP, thereby blocking synthesis and/or expression of the mRNA. By inhibiting CETP, the reverse cholesterol transport (RCT) pathway can be inhibited (or eliminated) thereby preventing the reduction in size density of the high density lipoproteins (HDL), prolonging HDL half life, and therefore increasing HDL levels. The ribozymes can be used to treat conditions associated with abnormal levels of CETP, specifically familial



CC vector to the patient. AAX67275 to AAX5752 represent specific examples  
 CC of nucleic acid molecules from the present invention  
 SQ Sequence 15 BP; 3 A; 4 C; 3 G; 0 T; 5 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 15;  
 Best Local Similarity 46.2%; Pred. No. 1.2e+03;  
 Matches 6; Conservative 5; Mismatches 2; Indels 0; Gaps 0;

QY 916 GGTCTTGGCTTT 928  
 |||: ||| :  
 Db 3 GGUCUAGCCAU 15

RESULT 1302

AA76173  
 ID AAT76173 standard; DNA; 15 BP.

XX AC AAT76173;

XX 12-SEP-1997 (first entry)

DE Human IL3 receptor antisense oligonucleotide.

XX Asthma; airway epithelium; adenosine free; cystic fibrosis;  
 KW chronic obstructive pulmonary disease; bronchitis; interleukin; ss.

XX Synthetic.

XX WO9640162-A1.

XX 19-DEC-1996.

XX 06-JUN-1996; 96WO-US009306.

XX 07-JUN-1995; 95US-00474497.

XX (UYEC-) UNIV EAST CAROLINA.

XX Nyce JW, Metzger WJ;

XX WPI; 1997-051871/05.

XX Treatment of airway diseases such as asthma - by topically applying  
 PT adenosine-free antisense oligo:nucleotide to airway epithelium of  
 PT subject.

PS Example 5; Page 29; 71pp; English.

XX A method for treating airway disease in a subject has been produced,  
 CC which involves the topical administration of an essentially adenosine  
 CC free antisense oligonucleotide (ON) to the airway epithelium of the  
 CC subject. The present sequence is an antisense oligonucleotide specific  
 CC for the human IL3 receptor. The method can be used to treat airway  
 CC diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary  
 CC disease, bronchitis and other airway diseases characterised by an  
 CC inflammatory response. By eliminating adenosine from the antisense ON,  
 CC its liberation upon antisense degradation is prevented, thereby  
 CC preventing adenosine-induced bronchoconstriction in patients with hyper-  
 CC reactive airways

XX Sequence 15 BP; 0 A; 5 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 15;  
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 938 TCTTCATTCGTTT 950  
 ||||| |||||  
 Db 1 TCTTCATTCGTTT 13

RESULT 1303

AAV49163/C  
 ID AAV49163 standard; DNA; 15 BP.

XX AC AAV49163;

XX 15-OCT-1998 (first entry)

DE rb gene antisense oligonucleotide rb-N-111.

XX rb gene; antisense oligonucleotide; modulate; gene expression; ss.

XX Synthetic.

XX Homo sapiens.

XX EP856579-A1.

XX 05-AUG-1998.

XX 31-JAN-1997; 97EP-00101531.

XX 31-JAN-1997; 97EP-00101531.

XX (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.

XX Schlingensiepen K, Brysch W;

XX WPI; 1998-400910/35.

XX Preparation of antisense oligo:nucleotide(s) which lack long runs of  
 PT consecutive guanosine or inosine - and have specific ratio of residues  
 PT able to form two or three hydrogen bonds, have greater activity and  
 PT reduced toxicity, used therapeutically or to modulate growth of cells in  
 PT culture.

PS Example 7; Fig 9c; 286pp; English.

XX AAV49008-236 represent antisense oligonucleotides directed against the rb  
 CC gene. Of these, only oligonucleotides AAV49008-52 resulted in effective  
 CC downregulation of negative growth control by rb, while oligonucleotides  
 CC AAV49052-236 had little effect. The oligonucleotides exemplify the  
 CC invention. The specification describes oligonucleotides that contain 8-30  
 CC nucleotides, which contain at most 8 nucleotides that can each form three  
 CC hydrogen bonds to cytosine; do not contain four consecutive nucleotides  
 CC able to form three H-bonds each to four consecutive cytosines; do not  
 CC contain two sequences of three consecutive nucleotides each able to form  
 CC three H-bonds to three consecutive cytosines, and the ratio between  
 CC residues able to form two H-bonds each (2R) or three such bonds (3R) is  
 CC given by 2R/3R = 0.33-0.72. The oligonucleotides are used to modulate  
 CC expression of genes, particularly the genes for p53, Erb-2, JunB, JunD,  
 CC TGF-beta 1 or beta 2 to control proliferation of primary cell cultures  
 CC (e.g. bone marrow stem, liver or kidney cells, osteoclasts, osteoblasts  
 CC and/or keratinocytes). The oligonucleotides can also be used to analyse  
 CC function of proteins (by altering their expression or activity) and  
 CC therapeutically, e.g. in cases of cancer or (targeting TGF) for  
 CC stimulating the immune system

XX Sequence 15 BP; 10 A; 1 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 15;  
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 909 TTTCTTTGTCCTT 921

Db 15 TTTATTGATCTT 3

RESULT 1304

AA57567  
 ID AAX57567 standard; DNA; 15 BP.

XX AC AAX57567;

I 16-JUL-1999 (first entry)  
 K Antisense oligo #6 to insulin-like growth factor I receptor.  
 E Antisense; human; insulin-like growth factor-1 receptor; IGF-IR;  
 X expression; inhibition; induction; apoptosis; tumour; liposoma; ss.  
 W  
 N  
 W  
 W  
 X  
 X  
 S Synthetic.  
 S Homo sapiens.  
 X  
 X WO9923259-A1.  
 N  
 N  
 D 14-MAY-1999.  
 X  
 X 03-NOV-1998; 98WO-US023418.  
 F  
 X 04-NOV-1997; 97US-00963886.  
 R  
 X (INEX-) INEX PHARM CORP.  
 A  
 A Zon G;  
 I  
 X WPI; 1999-313361/26.  
 R  
 X Human insulin-like growth factor-1 receptor gene antisense  
 X oligonucleotides.  
 T  
 T Disclosure; Page 16; 23pp; English.  
 S  
 X Sequences AAX57562-X57571 represent antisense oligonucleotides targeted  
 C to a region spanning 4-9 codons downstream of the AUG translation  
 C initiation codon of the human insulin-like growth factor-1 receptor (IGF-  
 C IR) gene. The antisense oligonucleotides inhibit the expression of IGF-  
 C IR, which in turn induces apoptosis, especially in a tumour cell. The  
 C oligonucleotides can be administered via a liposome  
 X  
 Q Sequence 15 BP; 2 A; 2 C; 3 G; 8 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 15;  
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 Y 905 TCATTTCCTTGG 917  
 b 1 TCCTTTATTGG 13  
 RESULT 1305  
 IAX30949  
 D AAX30949 standard; DNA; 15 BP.  
 X  
 C AAX30949;  
 X  
 X 21-MAY-1999 (first entry)  
 X  
 X Tag sequence of a transcript increased in colorectal cancer.  
 X  
 X Tag sequence; colorectal cancer; pancreatic cancer; colon cancer;  
 X diagnosis; prognosis; treatment; ss.  
 X  
 X Homo sapiens.  
 X  
 X WO9853319-A2.  
 N  
 N 26-NOV-1998.  
 D  
 X 20-MAY-1998; 98WO-US010277.  
 X  
 X 21-MAY-1997; 97US-0047352P.  
 X (UWJO ) UNIV JOHNS HOPKINS.  
 X Vogelstein B, Kinzler KW;  
 X

XX WPI; 1999-070161/06.  
 DR  
 XX Use of isolated gene transcripts - useful for developing products for the  
 PT diagnosis, prognosis and treatment of cancers, particularly colon and  
 PT pancreatic cancer.  
 XX  
 XX Claim 2; Page 22; 120pp; English.  
 PS  
 XX AAX30947-31815 represent tag sequences of transcripts that are  
 CC differentially expressed in colorectal cancer. In pancreatic cancer, or  
 CC in both. The tag sequences can be used to identify genes by matching the  
 CC tag to a gen data base member, or by using the tag sequences as probes to  
 CC isolate unidentified genes from cDNA libraries. The tag sequences can  
 CC also be used in a method for diagnosing colon or pancreatic cancer in a  
 CC sample suspected of being neoplastic. The method comprises comparing the  
 CC level of at least one transcript in a first sample of a tissue to a  
 CC second sample, where the first sample is a colonic tissue suspected of  
 CC being neoplastic and the second sample is a normal human colonic tissue.  
 CC The transcript is identified by a tag selected from AAX30947-31815. The  
 CC methods of the invention can be used in the diagnosis, prognosis and  
 CC treatment of cancer  
 XX  
 SQ Sequence 15 BP; 3 A; 6 C; 2 G; 4 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 15;  
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 Qy 922 TGCCTTTATCCC 934  
 Db 3 TGCCTGTATCCC 15  
 RESULT 1306  
 IAX53970  
 ID AAX53970 standard; DNA; 15 BP.  
 XX  
 AC AAX53970;  
 XX  
 DT 05-JUL-1999 (first entry)  
 XX  
 DE Human IL-3 receptor antisense oligonucleotide fragment.  
 XX  
 KW Antisense oligonucleotide; multiple target; antisense treatment;  
 KW impaired respiration; inflammation; lung disease;  
 KW pulmonary vasoconstriction; inflammation; allergic rhinitis;  
 KW acute asthma; allergy; asthma; pain; cystic fibrosis;  
 KW respiratory distress syndrome; pain; cystic fibrosis;  
 KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;  
 KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;  
 KW colon cancer; breast cancer; lung cancer; pancreatic cancer;  
 KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;  
 KW prostate cancer; ss.  
 XX  
 OS Synthetic.  
 XX  
 XX WO9913886-A1.  
 PN  
 XX 25-MAR-1999.  
 PD  
 XX 17-SEP-1998; 98WO-US019419.  
 PF  
 XX 17-SEP-1997; 97US-0059160P.  
 PR  
 XX 09-JUN-1998; 98US-00093972.  
 PR  
 XX (UVEC-) UNIV EAST CAROLINA.  
 PA  
 XX Nyce JW;  
 PI  
 XX WPI; 1999-229400/19.  
 DR  
 XX New antisense oligonucleotides used in treatment of, e.g. pulmonary  
 PT

PT vasoconstriction.  
XX Disclosure; Page 48; 120pp; English.  
XX  
CC The specification describes antisense oligonucleotides (AA52869-X55271) directed against at least 2 mRNAs selected from target genes, coding and non-coding regions of RNAs corresponding to target genes, gene initiation codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-end and the juxta-section between coding and non-coding regions and all segments of RNAs encoding proteins associated with one or more diseases, conditions or mixtures. The antisense oligonucleotides may be derived from sequences AA55272-74. These multiple target oligonucleotides (specifically AA55180-271) can be used for the antisense treatment of diseases and conditions. Typical diseases and conditions are those associated with impaired respiration and inflammation, including lung diseases, pulmonary vasoconstriction, inflammation, including lung acute asthma, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g. colon cancer, breast cancer, lung cancer, pancreatic cancer, hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as well as all types of cancers which may metastasize or have metastasized to the lungs, including breast and prostate cancer  
XX  
SQ Sequence 15 BP; 0 A; 5 C; 2 G; 8 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 15;  
Best Local Similarity 84.8%; Pred. No. 1.2e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 938 TCTTCATTGGTTT 950  
DB 1 TCTTCATTGGTTT 13  
RESULT 1307  
AA514755  
ID AAX14755 standard; DNA; 15 BP.  
XX  
AC AAX14755;  
XX  
JT 24-MAR-1999 (first entry)  
XX  
DE Triple helix third strand of Hepatitis B virus nucleotides 2405-2419.  
XX  
KW Triple formation; DNA detection; triple helix; identification; bacteria;  
KW oncogene; virus; ss.  
OS Synthetic.  
OS Hepatitis B virus.  
XX  
PN US5861244-A.  
XX  
PD 19-JAN-1999.  
XX  
PF 22-DEC-1993; 93US-00173489.  
XX  
PR 29-OCT-1992; 92US-00968436.  
XX  
PA (PROF-) PROFILE DIAGNOSTIC SCI INC.  
XX  
PI Hepburn AG, Wang C;  
XX  
DR WPI; 1999-130384/11.  
XX  
PT Assay of genetic sequences based on triplex formation from double stranded analyte - and hybrid of anchor and reporter sequences, with reporter released if triplex formation occurs, used e.g. to identify bacteria.  
XX  
PS Disclosure; Col 17-18; 168pp; English.  
XX

CC The present sequence represents a polynucleotide that is able to form a triple helix with a double stranded sequence. Cytosine bases in the present can be replaced with 5-methylcytosine for increased triplex stability. The present sequence is used in the assay of the invention, where it can be part of the anchor DNA or reporter DNA sequence. The assay comprises adding a sample containing double-stranded DNA test sequences to an aqueous medium containing at least one complex of an anchor DNA, attached to a solid support, and reporter DNA, where either a part of the anchor DNA or reporter DNA is designed to form a triple-strand structure with part of the test sequence. Triplex formation results in displacement of the reporter DNA which is detected as an indication of the presence of the DNA test sequence. The method is used to detect DNA sequences, particularly for identification of bacteria (by detecting genes for ribosomal RNA) in clinical samples, but also detection of oncogenes and Hepatitis B virus  
XX  
SQ Sequence 15 BP; 0 A; 9 C; 0 G; 6 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 15;  
Best Local Similarity 84.8%; Pred. No. 1.2e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 924 CCTTTTATCCCTC 936  
DB 3 CCTTCTCCCTC 15  
RESULT 1308  
AAX33414  
ID AAX33414 standard; DNA; 15 BP.  
XX  
AC AAX33414;  
XX  
DT 28-JUL-2000 (first entry)  
XX  
DE Low adenosine antisense oligonucleotide SEQ ID NO:1103.  
XX  
KW Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy;  
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;  
KW antiasthmatic; cytostatic; analgesic; impaired airway;  
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;  
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;  
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;  
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200009525-A2.  
XX  
PD 24-FEB-2000.  
XX  
PF 03-AUG-1999; 99WO-US017712.  
XX  
PR 03-AUG-1998; 98US-0095212P.  
XX  
PA (UYEC-) UNIV EAST CAROLINA.  
XX  
PI Nyce JW;  
XX  
DR WPI; 2000-205971/18.  
XX  
PT New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstriction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or cancers.  
XX  
PS Claim 18; Page 403; 1343pp; English.  
XX  
CC The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergic,

antithrombotic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma, impaired respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the ONS reduces side effects. The A-containing ONS break down with the release of deoxyadenosine which activates adenosine receptors causing bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the nucleotide sequences given in the sequence listing from the present invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185 sequences are also called SEQ ID NO:1 to 185, but the sequences differ from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to AAA33992) are specifically claimed ONS from the present invention. N.B. Sequences given in the disclosure of the present invention do not match up with their corresponding SEQ ID NO: sequences given in the sequence listing

Y 938 TCTTCATTGGTTT 950  
b 1 TCTTCCTTGGTTT 13

Q Sequence 15 BP; 0 A; 5 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 15;  
Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

RESULT 1309  
AAZ90250  
D AAZ90250 standard; DNA; 15 BP.  
X  
C AAZ90250;  
X  
T 22-MAY-2000 (first entry)  
X  
E Oligonucleotide SEQ ID NO:4, used in molecular torch construction.  
X  
W Molecular torch; fluorophore; quencher; hybridisation;  
W fluorescence signal; detection; quantification; target sequence; probe;  
W ss.  
X  
S Synthetic.  
X  
H Key Location/Qualifiers  
T modified\_base 1  
T /\*tag= a  
T /note= "Conjugated to polyethylene glycol (PEG) plus  
T AAZ90251 to form strand 3"  
T modified\_base 15  
T /\*tag= b  
T /note= "Conjugated to quencher DABCYL"  
X  
N WO200001850-A2.  
X  
D 13-JAN-2000.  
X  
F 01-JUL-1999; 99WO-US015098.  
X  
R 02-JUL-1998; 98US-0091616P.  
X  
A (GENP-) GEN-PROBE INC.  
X  
I Becker MM, Schroth G;  
X  
R WPI; 2000-182124/16.  
X  
PT New molecular torches for detecting a target nucleic acid in a sample,

comprise a target binding domain, a joining region and a target closing domain.

Example 1; Fig 6A; 58pp; English.

The invention relates to novel molecular torches comprising a target binding domain, a joining region, target closing domain, a fluorophore and a quencher. The molecular torches may be used in a novel method for determining whether a target nucleic acid sequence is present in a sample. In the absence of target nucleic acid, the target binding domain is hybridised to the target closing domain (a "closed torch"); the joining region facilitates formation of the closed torch. However, in the presence of the target nucleic acid, the target binding domain preferentially hybridises with the target sequence, displacing the closing domain (an "open torch"). The binding domain is biased towards the target sequence such that the target binding domain forms a more stable hybrid with the target sequence than with the target closing domain under the same hybridisation conditions. This is achieved by the introduction of features which will destabilise binding domain/closing domain hybrids relative to the binding domain/target hybrid (e.g., mismatches, abasic sites or bulges). In the closed torch, the fluorophore and quencher are in close proximity, meaning that no fluorescence signal is produced. On hybridisation of the target binding domain to the target sequence, the fluorophore and quencher are separated, enabling a signal to be produced. The molecular torches and methods of the invention can be used to detecting the presence of target nucleic acid sequences in samples (e.g., for diagnosis). They can also be used for quantifying the amount of target which may be present in a sample. Sequences AAZ90247-AAZ90252 represent nucleic acid sequences which are component parts of the strands used to construct molecular torches 1-4 used in an exemplification of the present invention

Sequence 15 BP; 0 A; 5 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 15;  
Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 908 TTTTCTTTGGTCT 920  
Db 2 TTTTCTTTGGTCT 14

RESULT 1310  
AAA06104/C  
ID AAA06104 standard; DNA; 15 BP.  
X  
X AC AAA06104;  
X  
X 14-JUN-2000 (first entry)  
X  
DE CFTR gene analysis oligonucleotide probe SEQ ID NO:114.

CFTR; cystic fibrosis transmembrane conductance regulator; detection; mutation; probe; human; hybridisation; ss.

Homo sapiens.

US6027880-A.

22-FEB-2000.

10-OCT-1995; 95US-00544381.

26-OCT-1993; 93US-00143312.

02-AUG-1994; 94US-00284064.

26-OCT-1994; 94WO-US012305.

02-AUG-1995; 95US-00510521.

(AFFY-) AFFYMETRIX INC.

Huang XC, Chee M, Lobban PE, Hubbell EA, Sheldon EL, Miyada CG;  
Cronin MT, Lipschutz RJ, Morris MS, Fodor SPA;



XX WPI; 2000-194825/17.  
 XX An array of nucleic acid probes immobilized on a solid support, useful  
 PT for identifying mutations in the cystic fibrosis transmembrane  
 PT conductance regulator.  
 XX  
 XX Disclosure; Col 107; 114pp; English.  
 XX  
 XX The present invention describes an array of nucleic acid probes  
 CC immobilised on a solid support, which comprises: (1) a first probe set,  
 CC comprising probes with a segment of at least 6 nucleotides complementary  
 CC to the CFTR (cystic fibrosis transmembrane conductance regulator) gene,  
 CC where the segment includes at least 1 interrogation position  
 CC complementary to a nucleotide in the CFTR gene sequence; and (2) second,  
 CC third and fourth probe sets, each comprising probes identical to those in  
 CC nucleotide. AAA05991 to AAA06240 represent CFTR gene analysis  
 CC oligonucleotide probes for use in the exemplification of the present  
 CC invention. The present invention also describes a method of comparing a  
 CC target nucleic acid with a reference sequence consisting of a  
 CC predetermined sequence of nucleotides, comprising: (a) hybridising a  
 CC sample comprising the target nucleic acid to an array of nucleic acid  
 CC probes immobilised on a solid support; (b) comparing the relative  
 CC specific binding of two corresponding probes from the first and second  
 CC probe sets; (c) assigning a nucleotide in the target sequence as the  
 CC complement of the interrogation position of the probe having the greater  
 CC specific binding; and (d) repeating (b) and (c) by comparing the relative  
 CC specific binding of a further two corresponding probes from the first and  
 CC second probe sets until each nucleotide of interest in the target  
 CC sequence has been assigned. The array is useful for analysis of the CFTR  
 CC gene, e.g. detection of mutations  
 XX  
 XX Sequence 15 BP; 7 A; 3 C; 2 G; 3 T; 0 U; 0 Other;  
 SQ  
 Query Match 13.4%; Score 9.8; DB 1; Length 15;  
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 JY 938 TCTTCATTGGTTT 950  
 Db 14 TCATCATTGGTGT 2  
 RESULT 1311  
 AAF19536  
 ID AAF19536 standard; DNA; 15 BP.  
 XX  
 AC AAF19536;  
 XX  
 XX 14-MAR-2001 (first entry)  
 XX  
 XX Human IL3 receptor polynucleotide fragment #1103.  
 XX  
 XX Low adenosine antisense oligonucleotide; phosphorothioate; allergy;  
 XX human; airway disorder; bronchoconstriction; lung inflammation;  
 XX surfactant depletion; respiratory; bronchodilator; antiinflammatory;  
 XX immunosuppressive; antiasthmatic; analgesic; hypotensive; cycostatic;  
 XX respiratory obstruction; pulmonary obstruction; impeded respiration;  
 XX surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;  
 XX respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;  
 XX pulmonary hypertension; emphysema; pulmonary transplantation rejection;  
 XX chronic obstructive pulmonary disease; pulmonary infection; bronchitis;  
 XX cancer; ss.  
 XX  
 XX Homo sapiens.  
 XX  
 XX WO200062736-A2.  
 XX  
 XX 26-OCT-2000.  
 XX  
 XX 24-MAR-2000; 2000WO-US008020.  
 XX

PR 06-APR-1999; 99US-0127958P.  
 XX (UYEC-) UNIV EAST CAROLINA.  
 PA (NYCE/) NYCE J W.  
 XX  
 PI Nyce JW;  
 XX  
 DR WPI; 2000-679539/66.  
 XX  
 XX Low adenosine (A) content antisense oligonucleotides which do not trigger  
 PT adenosine receptors during metabolism, useful e.g. for treating cancers  
 PT and respiratory obstructions.  
 XX  
 PS Claim 14; Page 207; 1592pp; English.  
 XX  
 XX The present invention describes low adenosine (A) content antisense  
 CC oligonucleotides and compositions (I) comprising them. In the antisense  
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.  
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,  
 CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.  
 CC The antisense oligonucleotides and (I) can be used to down-regulate the  
 CC expression and/or activity of target polypeptides associated with  
 CC lung/respiratory disorders and malignancies, such as stimulating and  
 CC activating peptide factors and transmitters, transcription factors,  
 CC immunoglobulins and antibodies, antibody receptors, cytokines and  
 CC chemokines, endogenously produced specific and non-specific enzymes,  
 CC binding proteins, adhesion molecules and their receptors, cytokine and  
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central  
 CC nervous system (CNS) and peripheral nervous and non-nervous system  
 CC receptors, CNS and peripheral nervous and non-nervous system peptide  
 CC transmitters, defensins, growth factors, vasoactive peptides and  
 CC receptors, binding proteins and malignancy associated proteins. The  
 CC antisense oligonucleotides may be used in this way to treat disorders  
 CC including respiratory obstruction (especially pulmonary obstruction  
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or  
 CC surfactant hypoproduction which are associated with a disease or  
 CC condition selected from pulmonary vasoconstriction, inflammation,  
 CC allergies, asthma, impeded respiration, respiratory distress syndrome  
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary  
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),  
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,  
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide  
 CC fragments and antisense oligonucleotides used in the exemplification of  
 CC the present invention  
 XX  
 SQ Sequence 15 BP; 0 A; 5 C; 2 G; 8 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 15;  
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 938 TCTTCATTGGTTT 950  
 Db 1 TCTTCATTGGTTT 13  
 RESULT 1312  
 AAF52180/c  
 ID AAF52180 standard; DNA; 15 BP.  
 XX  
 AC AAF52180;  
 XX  
 XX 30-MAR-2001 (first entry)  
 XX  
 XX IGF-I oligonucleotide #3140.  
 XX  
 XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 XX cycostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 XX skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 XX hyperneovascular condition; hyperplasia; kidney disease;

```

1 neovascular condition of the retina; ss.
2
3 Homo sapiens.
4
5 WO200078341-A1.
6
7 28-DEC-2000.
8
9 21-JUN-2000; 2000WO-AU000693.
10
11 21-JUN-1999; 99US-0140345P.
12
13 (MURD-) MURDOCH CHILDRENS RES INST.
14
15 Wright CJ, Werther GA, Edmondson SR;
16 WPI; 2001-041421/05.
17
18 Ameliorating the effects of a disorder, e.g. psoriasis, by administering
19 UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
20 inhibits or reduces growth factor mediated cell proliferation and/or
21 inflammation.
22
23 Example 8; Page 81; 201pp; English.
24
25 The present invention relates to a method for ameliorating the effects of
26 skin disorders. The method comprises contacting the skin with an
27 antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1
28 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
29 inhibiting or reducing growth factor mediated cell proliferation,
30 inflammation and/or other disorders. The present sequence is an
31 oligonucleotide which can be used to design the antisense
32 oligonucleotides of the present invention (see AAF45151 and AAF45153-
33 F45161). The method is useful for ameliorating the effects of psoriasis,
34 ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
35 neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
36 hyperneovascular condition such as a neovascular condition of the retina,
37 brain or skin, growth factor-mediated malignancies, other sclerotic
38 disease, kidney disease, hyperproliferation of the inside of blood
39 vessels or any other hyperplasia
40
41 Sequence 15 BP; 7 A; 2 C; 3 G; 3 T; 0 U; 0 Other;
42
43 Query Match 13.4%; Score 9.8; DB 1; Length 15;
44 Best Local Similarity 84.6%; Pred. No. 1.2e+03;
45 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
46
47 Y 940 TTCATTGGTTTAA 952
48 13 TTCACGTTTAA 1
49
50 RESULT 1313
51 VAF53792
52 ID AAF53792 standard; DNA; 15 BP.
53
54 AC AAF53792;
55
56 XT 30-MAR-2001 (first entry)
57
58 DE IGF-I oligonucleotide #4752.
59
60 Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
61 cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
62 skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
63 IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
64 growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
65 keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
66 hyperneovascular condition; hyperplasia; kidney disease;
67 neovascular condition of the retina; ss.
68
69 OS Homo sapiens.
70
71 XX WO200078341-A1.
72
73 PD 28-DEC-2000.
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000

```

```

PF 21-JUN-2000; 2000WO-AU000693.
XX
XX
PR 21-JUN-1999; 99US-0140345P.
XX
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
XX
PI Wraight CJ, Werther GA, Edmondson SR;
XX
XX
DR WPI; 2001-041421/05.
XX
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisenese nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
XX
PS Example 8; Page 75; 201pp; English.
XX
XX
CC The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisenese oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisenese
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
XX
SQ Sequence 15 BP; 5 A; 1 C; 8 G; 1 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 84.6%; Pred. No. 1.2e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 930 ATCCCTCCCTTC 942
Db ||||| ||||| |||||
14 ATCTCTCCGCTTC 2

RESULT 1315
AAF51296/c
ID AAF51296 standard; DNA; 15 BP.
XX
XX
AC AAF51296;
XX
XX
DT 30-MAR-2001 (first entry)
XX
XX
DE IGF-I oligonucleotide #2256.
XX
XX
KW Antisenese therapy; antiproliferative; antiinflammatory; antipsoriatic;
XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
XX hyperneovascular condition; hyperplasia; kidney disease;
XX neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU000693.
XX
XX
PR 21-JUN-1999; 99US-0140345P.
XX
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
XX
PI Wraight CJ, Werther GA, Edmondson SR;
XX
XX

```

R WPI; 2001-041421/05.

X Ameliorating the effects of a disorder, e.g. psoriasis, by administering

T UV (ultra-violet) treatment (optional) and an antisenase nucleic acid that

T inhibits or reduces growth factor mediated cell proliferation and/or

T inflammation.

X Example 8; Page 67; 201pp; English.

S The present invention relates to a method for ameliorating the effects of

X skin disorders. The method comprises contacting the skin with an

C antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1

C receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of

C inhibiting or reducing growth factor mediated cell proliferation,

C inflammation and/or other disorders. The present sequence is an

C oligonucleotide which can be used to design the antisense

C oligonucleotides of the present invention (see AAF45151 and AAF45153-

C F45161). The method is useful for ameliorating the effects of psoriasis,

C ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,

C neoplasias, scleroderma, warts, benign growths, cancers of the skin, a

C hyperneovascular condition such as a neovascular condition of the retina,

C brain or skin, growth factor-mediated malignancies, other sclerotic

C disease, kidney disease, hyperproliferation of the inside of blood

C vessels or any other hyperplasia

X Sequence 15 BP; 2 A; 3 C; 2 G; 3 T; 0 U; 0 Other;

SQ Query Match 13.4%; Score 9.8; DB 1; Length 15;

Best Local Similarity 84.6%; Pred. No. 1.2e+03;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 911 TCTTTGGTCTTTG 923

Db ||| ||||| |||

3 TCTTCCCTCATC 15

RESULT 1317

AAF53790

ID AAF53790 standard; DNA; 15 BP.

AC AAF53790;

XT 30-MAR-2001 (first entry)

XE IGF-I oligonucleotide #4750.

W Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;

W cytosstatic; dermatological; cardiant; virucide; ophthalmological; keloid;

W skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;

W IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;

W growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;

W keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;

W hyperneovascular condition; hyperplasia; kidney disease;

W neovascular condition of the retina; ss.

X Homo sapiens.

XS WO200078341-Al.

XX 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

XX Wright CJ, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering

PT UV (ultra-violet) treatment (optional) and an antisenase nucleic acid that

PT inhibits or reduces growth factor mediated cell proliferation and/or

PT inflammation.

PS Example 8; Page 67; 201pp; English.

PT inhibits or reduces growth factor mediated cell proliferation and/or

PT inflammation.

XX Example 8; Page 91; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of

CC skin disorders. The method comprises contacting the skin with an

CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1

CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of

CC inhibiting or reducing growth factor mediated cell proliferation,

CC inflammation and/or other disorders. The present sequence is an

CC oligonucleotide which can be used to design the antisense

CC oligonucleotides of the present invention (see AAF45151 and AAF45153-

CC F45161). The method is useful for ameliorating the effects of psoriasis,

CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,

CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a

CC hyperneovascular condition such as a neovascular condition of the retina,

CC brain or skin, growth factor-mediated malignancies, other sclerotic

CC disease, kidney disease, hyperproliferation of the inside of blood

CC vessels or any other hyperplasia

XX Sequence 15 BP; 2 A; 7 C; 0 G; 6 T; 0 U; 0 Other;

SQ Query Match 13.4%; Score 9.8; DB 1; Length 15;

Best Local Similarity 84.6%; Pred. No. 1.2e+03;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 927 TTTATCCCTCCTC 939

Db ||| ||||| |||

3 TTTCTCCCTCATC 15

RESULT 1318

AAF50098/C

ID AAF50098 standard; DNA; 15 BP.

AC AAF50098;

XX 30-MAR-2001 (first entry)

XX IGF-I oligonucleotide #1058.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;

XX cytosstatic; dermatological; cardiant; virucide; ophthalmological; keloid;

XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;

XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;

XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;

XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;

XX hyperneovascular condition; hyperplasia; kidney disease;

XX neovascular condition of the retina; ss.

OS Homo sapiens.

XX WO200078341-Al.

XX 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

XX Wright CJ, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering

PT UV (ultra-violet) treatment (optional) and an antisenase nucleic acid that

PT inhibits or reduces growth factor mediated cell proliferation and/or

PT inflammation.

PS Example 8; Page 67; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,  
 CC brain or skin, growth factor-mediated malignancies, other sclerotic  
 CC disease, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia  
 XX  
 SQ Sequence 15 BP; 6 A; 3 C; 2 G; 4 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 15;  
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 911 TCATTGGCTCTTG 923  
 DB 13 TCAATGGCTCTTG 1  
 RESULT 1319  
 AAF49071/c  
 ID AAF49071 standard; DNA; 15 BP.  
 AC AAF49071;  
 XX  
 DT 30-MAR-2001 (first entry)  
 XX  
 DE IGF-I oligonucleotide #31.  
 XX  
 KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200078341-A1.  
 XX  
 PD 28-DEC-2000.  
 XX  
 PF 21-JUN-2000; 2000WO-AU000693.  
 XX  
 PR 21-JUN-1999; 99US-0140345P.  
 XX  
 PA (MURD-) MURDOCH CHILDRENS RES INST.  
 XX  
 PI Wright CJ, Werther GA, Edmondson SR;  
 XX  
 DR WPI; 2001-041421/05.  
 XX  
 PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 PT inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.  
 XX  
 PS Example 8; Page 61; 201pp; English.  
 XX  
 CC The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1

CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,  
 CC brain or skin, growth factor-mediated malignancies, other sclerotic  
 CC disease, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia  
 XX  
 SQ Sequence 15 BP; 8 A; 3 C; 2 G; 2 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 15;  
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 905 TCATTTCCTTGG 917  
 DB 15 TCCTTTTATTGG 3  
 RESULT 1320  
 AAF52176/c  
 ID AAF52176 standard; DNA; 15 BP.  
 AC AAF52176;  
 XX  
 DT 30-MAR-2001 (first entry)  
 XX  
 DE IGF-I oligonucleotide #3136.  
 XX  
 KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200078341-A1.  
 XX  
 PD 28-DEC-2000.  
 XX  
 PF 21-JUN-2000; 2000WO-AU000693.  
 XX  
 PR 21-JUN-1999; 99US-0140345P.  
 XX  
 PA (MURD-) MURDOCH CHILDRENS RES INST.  
 XX  
 PI Wright CJ, Werther GA, Edmondson SR;  
 XX  
 DR WPI; 2001-041421/05.  
 XX  
 PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 PT inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.  
 XX  
 PS Example 8; Page 81; 201pp; English.  
 XX  
 CC The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense

oligonucleotides of the present invention (see AAF45151 and AAF45153-  
F45161). The method is useful for ameliorating the effects of psoriasis,  
ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
hyperneovascular condition such as a neovascular condition of the retina,  
brain or skin, growth factor-mediated malignancies, other sclerotic  
disease, kidney disease, hyperproliferation of the inside of blood  
vessels or any other hyperplasia

Sequence 15 BP; 6 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 15;  
Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Y 942 CATTGGTTTAATG 954  
||| ||| ||| ||| |||  
b 15 CACTGTTTAATG 3

RESULT 1321  
AAF47626/c  
D AAF47626 standard; DNA; 15 BP.  
X C AAF47626;  
X

X 30-MAR-2001 (first entry)  
X IGFBP3 oligonucleotide #1046.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
hyperneovascular condition; hyperplasia; kidney disease;  
neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
inhibits or reduces growth factor mediated cell proliferation and/or  
inflammation.

Example 7; Page 51; 201pp; English.

The present invention relates to a method for ameliorating the effects of  
skin disorders. The method comprises contacting the skin with an  
antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
inhibiting or reducing growth factor mediated cell proliferation,  
inflammation and/or other disorders. The present sequence is an  
oligonucleotide which can be used to design the antisense  
oligonucleotides of the present invention (see AAF45151 and AAF45153-  
F45161). The method is useful for ameliorating the effects of psoriasis,  
ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
neoplasias, scleroderma, warts, benign growths, cancers of the skin, a

hyperneovascular condition such as a neovascular condition of the retina,  
brain or skin, growth factor-mediated malignancies, other sclerotic  
disease, kidney disease, hyperproliferation of the inside of blood  
vessels or any other hyperplasia

Sequence 15 BP; 6 A; 4 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 15;  
Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 901 CTGGTCATTTCCT 913  
||||| ||| |||  
Db 13 CTGGTCATGTCCT 1

RESULT 1322  
AAF53516  
ID AAF53516 standard; DNA; 15 BP.

XX AAF53516;

XX 30-MAR-2001 (first entry)

IGF-I oligonucleotide #4476.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
hyperneovascular condition; hyperplasia; kidney disease;  
neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
inhibits or reduces growth factor mediated cell proliferation and/or  
inflammation.

Example 8; Page 90; 201pp; English.

The present invention relates to a method for ameliorating the effects of  
skin disorders. The method comprises contacting the skin with an  
antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
inhibiting or reducing growth factor mediated cell proliferation,  
inflammation and/or other disorders. The present sequence is an  
oligonucleotide which can be used to design the antisense  
oligonucleotides of the present invention (see AAF45151 and AAF45153-  
F45161). The method is useful for ameliorating the effects of psoriasis,  
ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
hyperneovascular condition such as a neovascular condition of the retina,  
brain or skin, growth factor-mediated malignancies, other sclerotic  
disease, kidney disease, hyperproliferation of the inside of blood  
vessels or any other hyperplasia

XX SQ Sequence 15 BP; 0 A; 7 C; 0 G; 8 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 15;  
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 928 TTATCCCTCCTCT 940  
 |||||  
 Db 1 TTCTCTCTCTCT 13

RESULT 1323  
 AAF49072/c  
 ID AAF49072 standard; DNA; 15 BP.  
 XX AC AAF49072;  
 DT 30-MAR-2001 (first entry)  
 XX IGF-I oligonucleotide #32.  
 KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.  
 XX OS Homo sapiens.  
 XX PN WO200078341-A1.  
 XX PD 28-DEC-2000.  
 XX PF 21-JUN-2000; 2000WO-AU000693.  
 XX PR 21-JUN-1999; 99US-0140345P.  
 XX PA (MURD-) MURDOCH CHILDRENS RES INST.  
 XX PI Wright CJ, Werther GA, Edmondson SR;  
 DR WPI; 2001-041421/05.  
 PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 PT inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.  
 XX PS Example 8; Page 61; 201pp; English.  
 CC The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, ptyriasis, ruba, pilaris, serborrhoea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,  
 CC brain or skin, growth factor-mediated malignancies, other sclerotic  
 CC disease, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia  
 XX SQ Sequence 15 BP; 9 A; 3 C; 2 G; 1 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 15;

Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 905 TCATTTCCTTGG 917  
 |||||  
 Db 14 TCCTTTATTTGG 2

RESULT 1324  
 AAF50094/c  
 ID AAF50094 standard; DNA; 15 BP.  
 XX AC AAF50094;  
 DT 30-MAR-2001 (first entry)  
 XX IGF-I oligonucleotide #1054.  
 KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.  
 XX OS Homo sapiens.  
 XX PN WO200078341-A1.  
 XX PD 28-DEC-2000.  
 XX PF 21-JUN-2000; 2000WO-AU000693.  
 XX PR 21-JUN-1999; 99US-0140345P.  
 XX PA (MURD-) MURDOCH CHILDRENS RES INST.  
 XX PI Wright CJ, Werther GA, Edmondson SR;  
 DR WPI; 2001-041421/05.  
 PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 PT inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.  
 XX PS Example 8; Page 67; 201pp; English.  
 CC The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, ptyriasis, ruba, pilaris, serborrhoea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,  
 CC brain or skin, growth factor-mediated malignancies, other sclerotic  
 CC disease, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia  
 XX SQ Sequence 15 BP; 9 A; 3 C; 1 G; 2 T; 0 U; 0 Other;  
 Query Match 13.4%; Score 9.8; DB 1; Length 15;  
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 915 TGGTCTTGCTT 927

RESULT 1326  
ID AAF50093/c  
XX AAF50093 standard; DNA; 15 BP.  
AC  
XX AAF50093;  
DT 30-MAR-2001 (first entry)  
XX  
DE IGF-I oligonucleotide #1053.  
XX  
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
KW IGF binding protein; IGFBP3; inflammation; psoriasis; pilaris;  
KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
KW hyperneovascular condition; hyperplasia; kidney disease;  
XX neovascular condition of the retina; ss.  
OS Homo sapiens.  
XX  
PN W0200078341-A1.  
XX  
PD 28-DEC-2000.  
XX  
PF 21-JUN-2000; 2000WO-AU000693.  
XX  
PR 21-JUN-1999; 99US-0140345P.  
XX  
PA (MURD-) MURDOCH CHILDRENS RES INST.  
XX  
PI Wright CJ, Werther GA, Edmondson SR;  
XX WPI; 2001-041421/05.  
XX  
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
PT inhibits or reduces growth factor mediated cell proliferation and/or  
PT inflammation.  
XX  
PS Example 8; Page 67; 201pp; English.  
XX  
CC The present invention relates to a method for ameliorating the effects of  
CC skin disorders. The method comprises contacting the skin with an  
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
CC inhibiting or reducing growth factor mediated cell proliferation,  
CC inflammation and/or other disorders. The present sequence is an  
CC oligonucleotide which can be used to design the antisense  
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
CC F45161). The method is useful for ameliorating the effects of psoriasis,  
CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
CC hyperneovascular condition such as a neovascular condition of the retina,  
CC brain or skin, growth factor-mediated malignancies, other sclerotic  
CC disease, kidney disease, hyperproliferation of the inside of blood  
CC vessels or any other hyperplasia  
XX  
SQ Sequence 15 BP; 9 A; 3 C; 2 G; 1 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 15;  
Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 915 TGGTCTTTCCTT 927  
DB 14 TGGTCTTTCCTT 2  
RESULT 1327  
ID AAF53791  
XX AAF53791 standard; DNA; 15 BP.  
XX

13 TGGTCTTTCCTT 1  
RESULT 1325  
ID AAF49073/c  
XX AAF49073 standard; DNA; 15 BP.  
XX  
AC  
XX AAF49073;  
DT 30-MAR-2001 (first entry)  
XX  
DE IGF-I oligonucleotide #33.  
XX  
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
KW IGF binding protein; IGFBP3; inflammation; psoriasis; pilaris;  
KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
KW hyperneovascular condition; hyperplasia; kidney disease;  
XX neovascular condition of the retina; ss.  
OS Homo sapiens.  
XX  
PN W0200078341-A1.  
XX  
PD 28-DEC-2000.  
XX  
PF 21-JUN-2000; 2000WO-AU000693.  
XX  
PR 21-JUN-1999; 99US-0140345P.  
XX  
PA (MURD-) MURDOCH CHILDRENS RES INST.  
XX  
PI Wright CJ, Werther GA, Edmondson SR;  
XX WPI; 2001-041421/05.  
XX  
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
PT inhibits or reduces growth factor mediated cell proliferation and/or  
PT inflammation.  
XX  
PS Example 8; Page 61; 201pp; English.  
XX  
CC The present invention relates to a method for ameliorating the effects of  
CC skin disorders. The method comprises contacting the skin with an  
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
CC inhibiting or reducing growth factor mediated cell proliferation,  
CC inflammation and/or other disorders. The present sequence is an  
CC oligonucleotide which can be used to design the antisense  
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
CC F45161). The method is useful for ameliorating the effects of psoriasis,  
CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
CC hyperneovascular condition such as a neovascular condition of the retina,  
CC brain or skin, growth factor-mediated malignancies, other sclerotic  
CC disease, kidney disease, hyperproliferation of the inside of blood  
CC vessels or any other hyperplasia  
XX  
SQ Sequence 15 BP; 9 A; 2 C; 2 G; 2 T; 0 U; 0 Other;  
Query Match 13.4%; Score 9.8; DB 1; Length 15;  
Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
ZY 905 TCATTTTCTTTCG 917  
DB 13 TCCTTTTATTGG 1



AC AAF53791;  
XX  
DT 30-MAR-2001 (first entry)  
XX  
DE IGF-I oligonucleotide #4751.  
XX  
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;  
XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
XX hyperneovascular condition; hyperplasia; kidney disease;  
XX neovascular condition of the retina; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO200078341-A1.  
XX  
XX 28-DEC-2000.  
XX  
XX 21-JUN-2000; 2000WO-AU000693.  
XX  
XX 21-JUN-1999; 99US-0140345P.  
XX  
XX (MURD-) MURDOCH CHILDRENS RES INST.  
XX  
XX Wright CJ, Werther GA, Edmondson SR;  
XX  
XX WPI; 2001-041421/05.  
XX  
XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
XX inhibits or reduces growth factor mediated cell proliferation and/or  
XX inflammation.  
XX  
XX Example 8; Page 91; 201pp; English.  
XX  
XX The present invention relates to a method for ameliorating the effects of  
XX skin disorders. The method comprises contacting the skin with an  
XX antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
XX receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
XX inhibiting or reducing growth factor mediated cell proliferation,  
XX inflammation and/or other disorders. The present sequence is an  
XX oligonucleotide which can be used to design the antisense  
XX oligonucleotides of the present invention (see AAF45151 and AAF45153-  
XX P45161). The method is useful for ameliorating the effects of psoriasis,  
XX ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
XX neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
XX hyperneovascular condition such as a neovascular condition of the retina,  
XX brain or skin, growth factor-mediated malignancies, other sclerotic  
XX disease, kidney disease, hyperproliferation of the inside of blood  
XX vessels or any other hyperplasia  
XX  
XX Sequence 15 BP; 1 A; 7 C; 1 G; 6 T; 0 U; 0 Other;  
XX  
Query Match 13.4%; Score 9.8; DB 1; Length 15;  
Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Qy 927 TTTATCCCTCCTC 939  
Tb 2 TTTCTCCCTCATC 14  
RESULT 1328  
AAF50096/c  
ID AAF50096 standard; DNA; 15 BP.  
XX  
XX AAF50096;  
XX  
XX 30-MAR-2001 (first entry)  
XX

DE IGF-I oligonucleotide #1056.  
XX  
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;  
XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
XX hyperneovascular condition; hyperplasia; kidney disease;  
XX neovascular condition of the retina; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO200078341-A1.  
XX  
XX 28-DEC-2000.  
XX  
XX 21-JUN-2000; 2000WO-AU000693.  
XX  
XX 21-JUN-1999; 99US-0140345P.  
XX  
XX (MURD-) MURDOCH CHILDRENS RES INST.  
XX  
XX Wright CJ, Werther GA, Edmondson SR;  
XX  
XX WPI; 2001-041421/05.  
XX  
XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
XX inhibits or reduces growth factor mediated cell proliferation and/or  
XX inflammation.  
XX  
XX Example 8; Page 67; 201pp; English.  
XX  
XX The present invention relates to a method for ameliorating the effects of  
XX skin disorders. The method comprises contacting the skin with an  
XX antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
XX receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
XX inhibiting or reducing growth factor mediated cell proliferation,  
XX inflammation and/or other disorders. The present sequence is an  
XX oligonucleotide which can be used to design the antisense  
XX oligonucleotides of the present invention (see AAF45151 and AAF45153-  
XX P45161). The method is useful for ameliorating the effects of psoriasis,  
XX ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
XX neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
XX hyperneovascular condition such as a neovascular condition of the retina,  
XX brain or skin, growth factor-mediated malignancies, other sclerotic  
XX disease, kidney disease, hyperproliferation of the inside of blood  
XX vessels or any other hyperplasia  
XX  
XX Sequence 15 BP; 8 A; 3 C; 2 G; 2 T; 0 U; 0 Other;  
XX  
Query Match 13.4%; Score 9.8; DB 1; Length 15;  
Best Local Similarity 84.6%; Pred. No. 1.2e+03;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Qy 911 TCTTTGGTCTTTG 923  
Db 15 TCAATGGTCTTTG 3  
RESULT 1329  
AAF70051/c  
ID AAF70051 standard; DNA; 15 BP.  
XX  
XX AAF70051;  
XX  
XX 18-APR-2001 (first entry)  
XX  
XX Human TNFRSF11B gene ASO probe, SEQ ID NO: 107.  
XX  
XX Human; TNFRSF11B; osteoclastogenesis inhibitory factor;  
XX single nucleotide polymorphism; SNP; osteoclast recruitment;

Y	osteoclast function; osteoporosis; metastatic bone disease;	XX	Jarvis T, Von Carlowitz I, Mcswiggen JA, Hamblin PA, Ellis JH;
V	Paget's disease; rheumatoid arthritis; periodontal bone disease; ASO;	PI	
U	allele-specific oligonucleotide; probe; ss.	XX	
T		DR	WPI; 2001-550088/61.
S	Homo sapiens.	XX	
R	WO200104137-A1.	PT	New nucleic acid(s) for regulating the Grb2-related with Insert Domain
Q		PT	(GRID) gene comprises using antisense and enzymatic nucleic acid
P		PT	molecules such as hammerhead ribozymes.
O		XX	
N	18-JAN-2001.	PS	Claim 4; Page 93; 108pp; English.
M	10-JUL-2000; 2000WO-US018803.	XX	
L	09-JUL-1999; 99US-0143020P.	CC	The present invention relates to oligonucleotides that downregulate the
K	(GENA-) GENAISSANCE PHARM INC.	CC	expression of human Grb2-related with Insert Domain (GRID) gene. GRID is
J		CC	a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful
I	Chew A, Denton RR, Duda A, Nandabalan K, Stephens JC;	CC	for modulating the expression of GRID, to treat conditions such as
H	WPI; 2001-147175/15.	CC	tissue/graft rejection and leukaemia. The oligonucleotides can also be
G		CC	administered in conjunction with other therapies such as radiation,
F	Human Osteoclastogenesis Inhibitory Factor nucleotides, comprising single	CC	chemotherapy and cyclosporin treatment. The present oligonucleotide was
E	nucleotide polymorphisms, useful for studying e.g. osteoporosis, Paget's	CC	used to illustrate the invention
D	disease and rheumatoid arthritis.	XX	
C	Claim 15; Page 23; 114pp; English.	SQ	Sequence 15 BP; 2 A; 6 C; 0 G; 0 T; 7 U; 0 Other;
B			
A	The present sequence is a probe used to detect polymorphisms in the human	Query Match	13.4%; Score 9.8; DB 1; Length 15;
Z	osteoclastogenesis inhibitory factor (TNFRSF11B). Polynucleotides	Best Local Similarity	46.2%; Pred. No. 1.2e+03;
Y	comprising one or more of twenty four novel single nucleotide	Matches	6; Conservative 5; Mismatches 2; Indels 0; Gaps 0;
X	polymorphisms in the TNFRSF11B gene have been identified. TNFRSF11B		
W	regulate osteoclast recruitment and function. An understanding of	QY	930 ATCCCTCTCTTC 942
V	variations in the gene should thus be useful in developing new therapies	Db	1 AUCUCUUCUCUC 13
U	for metabolic disorders caused by abnormal osteoclast recruitment and	RESULT 1331	
T	function such as osteoporosis, metastatic bone disease, Paget's disease,	AAF69383/C	
S	rheumatoid arthritis and periodontal bone disease	ID	AAF69383 standard; DNA; 15 BP.
R		XX	
Q	Sequence 15 BP; 7 A; 4 C; 3 G; 1 T; 0 U; 0 Other;	AC	AAF69383;
P		XX	
O		DT	18-APR-2001 (first entry)
N		XX	
M		DE	Human IL4Ralpha gene probe #23.
L	Query Match	XX	
K	Best Local Similarity	KW	Polymorphism; human; interleukin 4 receptor-alpha; IL4R-alpha;
J	Matches	KW	allergic disease; probe; ss.
I	11; Conservative	OS	Homo sapiens.
H	0; Mismatches	XX	
G	2; Indels	FN	WO200104270-A1.
F	0; Gaps	XX	
E	0;	PD	18-JAN-2001.
D		XX	
C	Y 906 CATTTTCTTTGGT 918	PF	13-JUL-2000; 2000WO-US019094.
B	15 CGTTTACTTTGGT 3	XX	
A		XX	13-JUL-1999; 99US-0143435P.
Z		DR	(GENA-) GENAISSANCE PHARM INC.
Y		FA	
X	ESULT 1330	XX	
W	BL48621	PI	Chew A, Denton RR, Duda A, Nandabalan K, Stephens JC;
V	D ABL48621 standard; RNA; 15 BP.	PI	Windemuth AK;
U	X C ABL48621;	XX	
T	X C	XX	WPI; 2001-103078/11.
S	X 27-JUN-2003 (first entry)	DR	
R	X Human GRID enzymatic target oligonucleotide #3.	XX	New isolated polynucleotide useful for the identification of therapeutics
Q	X Human; Grb2-related with Insert Domain; GRID; T-cell;	PT	in allergic diseases is new.
P	X co-stimulatory adaptor protein; tissue rejection; graft rejection;	XX	
O	X leukaemia; cytostatic; ss.	PS	Claim 15; Page 42; 188pp; English.
N	X Homo sapiens.	XX	
M	X WO200162911-A2.	CC	The present invention relates to polymorphisms of the human interleukin 4
L	X 30-AUG-2001.	CC	receptor-alpha gene (IL4R-alpha; see AAF57718 for the reference
K	X 23-FEB-2001; 2001WO-US005957.	CC	sequence). Polynucleotides comprising polymorphic gene variants are
J	X 24-FEB-2000; 2000US-0184594P.	CC	useful for therapeutic purposes. For example, where a patient may benefit
I	X (RIBO-) RIBOZYME PHARM INC.	CC	from expression of a particular IL4Ralpha protein isoform, an expression
H	X (GLAX ) GLAXO GROUP LTD.	CC	vector encoding the isoform may be administered to the patient. It may
G		CC	desirable to decrease or block expression of a particular IL4Ralpha